BORDER
MANAGEMENT TODAY

SAN DIEGO!
USA REPORT 2023

PREVENTING HUMAN TRAFFICKING:
IBMATA joins forces with RSO Bali Group, Singapore

NON INTRUSTIVE INSPECTION TECHNOLOGY AT LAND BORDERS:
US CBP leads the way

US BORDER CRISIS:
We hear from the experts

ICO TRAVEL CREDENTIALS
What next?

A NEW BORDER MANAGEMENT AUTHORITY IN SOUTH AFRICA:
Johannesburg here we come!

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Message from the Chairman

Welcome to edition 9 of Border Management Today magazine, the official publication of IBMATA.

In many respects, Border Management Today tells the ongoing story of the global evolution of border controls. Whilst many of us in this business – not least IBMATA itself – struggled for survival during COVID, there is clear evidence that the pandemic did not simply create significant challenges to international trade and travel. It also threw up solutions that many of us had been advocating long before it.

The quest for frictionless travel and trade was enhanced significantly during the COVID period, to the extent that governments across the world were forced to wake up to the fact that advances in technology have paved the way for a new era of border control. We don't need to open every passport anymore to manage immigration and security controls; nor do we need to open every box or lorry to do customs. This new way of doing things – described variously as "contactless" or "frictionless" borders – not only limits the possibility of passing on infections and viruses through human contact. It has also given birth to a new culture of border control, which is now being embraced by border agencies across the world. Many of the features in this edition – from private and public sector alike – highlight the value of this technology.

Not just in facilitating the global movement of people of goods across borders to restore growth, but also in control and compliance mechanisms to protect countries from harm.

Since our last edition we have concluded successful events in Singapore and San Diego. We continue to build partnerships with Border Agencies, International Government Agencies and non-Governmental Organisations as we go. We hosted a joint workshop with the Regional Support Office of the Bali Group in Singapore, demonstrating the value our members can bring to the global challenges of human trafficking and human smuggling. A topic that also features strongly in this edition.

When we asked our members where they would like us to go for our events, a significant majority chose the USA. Our first Americas summit in San Diego last month was an overwhelming success, which demonstrates (a) that US Customs and Border Protection continue to lead the world on border management innovation; and (b) that they recognise the value of supporting public / private organisations such as IBMATA in sharing their vision for the future.

Of course, there is more to border control than technology; and the US border is not without its problems. We heard first-hand about the unprecedented number of irregular migrants being detected at the Southern border; and we have articles from the very best border and immigration

experts in the world setting out the scale of the problem there, and the policy challenges that underpin it. These will resonate with many other border agencies around the world who are struggling with similar challenges, again reinforcing the need for international collaboration in managing borders.

Looking forward, our attention has now switched to our first Africa Summit which will be held in Johannesburg in May. We have an article from Dr Michael Masiapato, the newly appointed head of the Border Management Authority of South Africa, setting out some of the challenges he is facing in merging differing immigration, customs and security functions at the border. A topic close to the hearts of many of us, who have been through similar challenges ourselves. This reinforces my long-held view that borders work best when we share best practice, across the public and the private sector alike, to build international borders that are fit for the future.

Thank you for your continued support, and I hope to see many of you in Johannesburg for the next leg of our IBMATA journey.

Tony Smith

Tony Smith CBE,
Chairperson *at* International Border Management and Technologies Association

IBMATA GOES TO AMERICA

By Tony Smith, Chairman, IBMATA

It was a great honour and a privilege to chair IBMATA's first ever Americas Summit in the beautiful city of San Diego from 1st – 3rd February. We are hugely grateful to all our friends at US Customs and Border Protection (CBP) for hosting us.

I was pleased to invite my good friend Kevin MacAleenan to chair the opening sessions of the event – not least because many of the CBP speakers and panellists actually worked for Kevin during his time as CBP Commissioner!

KEVIN MCALEENAN, FORMER CBP COMMISSIONER, CHAIRING THE OPENING SESSION OF IBMATA (USA) 2023

PETE FLORES DELIVERING THE OPENING KEYNOTE ADDRESS AT THE FIRST IBMATA AMERICAS SUMMIT, FEBRUARY 2023, SAN DIEGO

The opening keynote was delivered by Pete Flores, the Executive Assistant Commissioner, Office of Field Operations within U.S. Customs and Border Protection (CBP). As part of his responsibilities, EAC Flores leads over 31,000 uniformed and non-uniformed personnel within the offices of Admissibility and Passenger Programs, Agriculture and Trade Liaison, Cargo and Conveyance Security, Mission Support, National Targeting Centers, Operations Directorate, Preclearance Operations, and Planning Program Analysis and Evaluation. He manages an annual budget of $6.5B for operations at CBP's ports of entry and numerous programs to support national security and the facilitation of lawful trade and travel. Prior to this EAC Flores served as the Director of Field Operations for the San Diego Field Office where he oversaw 2,488 employees assigned to five land border ports of entry at Andrade, Calexico, Tecate, Otay Mesa, and San Ysidro. The San Diego Field Office also encompasses San Diego's Lindbergh Field including the San Diego seaport, the Cross Border Xpress and Brown Field.

![IBMATA — INTERNATIONAL BORDER MANAGEMENT AND TECHNOLOGIES ASSOCIATION]

BORDER MANAGEMENT & TECHNOLOGIES SUMMIT

Lorem ipsum

AFRICA 2023

Johannesburg, South Africa
9-11 May 2023

WWW.IBMATA.ORG

This was followed by an expert panel moderated by Melissa Odegaard from S2 Global, discussing the use of new and emerging border management systems and technologies in the region. This panel included expert insights from Jennifer de la O, Director of CBP Field Operations in San Diego; Aaron Heitke, Chief Patrol Agent for the US Border Patrol, San Diego region; Manuel A Garza Jr, Director of Customs Trade Partnership Against Terrorism (CTPAT), CBP; and Maria Rodriguez Molina, Project Development Program Manager at the San Diego Association of Governments (SANDAG).

EXPERT PANEL DISCUSSING NEW AND EMERGING BORDER MANAGEMENT SYSTEMS AND TECHNOLOGIES IN SAN DIEGO REGION

DIANE SABATINO INTERVIEW WITH TONY SMITH, CHAIRMAN OF IBMATA, FOR US CBP FIELD OFFICE COMMUNICATIONS

We then heard from Diane Sabatino, Deputy Executive Assistant Commissioner of U.S. Customs and Border Protection's (CBP) Office of Field Operations. Diane provided us with an update on the joint CBP / TSA initiative to deliver a new "kerb to gate" process for outbound travellers, and how technology is supporting non-intrusive inspections (NII) at the US Southern border. Diane was joined by Austin Gould, Assistant Administrator for Requirements and Capabilities Analysis, U.S. Transportation Security Administration (TSA). This presentation demonstrated the value of close working relationships between CBP and TSA at the US border, both in terms of delivering passenger facilitation and enhanced border security.

It was a particular pleasure to participate in an interview with Diane and the CBP Communications Team to discuss the value of international collaboration on Border Management across both the public and private sector, which is the foundation of our mission here at IBMATA.

We were pleased to welcome sponsor presentations from Roy Schwartz (Vice President of Echodyne) on the use of radar systems for smart border management; and Stacy Brown, President and CEO of Strongwatch. As is customary with all our events, our sponsors lounge hosted several breakout sessions for delegates from different countries and diverse companies to observe latest developments in technologies and to discuss matters of mutual interest.

BREAKOUT SESSIONS IN THE SPONSOR'S LOUNGE, IBMATA SAN DIEGO

HOW CAN TECHNOLOGY FACILITATE BORDER CLEARANCE? PANEL DISCUSSION LED BY NELSON BAIDOO WITH VISION BOX, CBP AND CBSA.

We also heard from Diane Witte, Assistant Director, Enforcement and Removal Operations, U.S. Immigration and Customs Enforcement (ICE) discussing the challenges facing her Department.

The morning session concluded with a panel focussed specifically on how technology can assist border management and facilitation, superbly moderated by Nelson Baidoo, Chairman of the Border Commerce and Security Council. This panel comprised of Jody Hardin, Executive Director, Planning, Program Analysis and Evaluation, Office of Field Operations, U.S. Customs and Border Protection; Jean-Francois Lennon, Vice President of Strategic Sales and Global Partnerships, Vision-Box; and Megan Young, Director, Acceleration, Integration and Emerging Border Technologies, Canada Border Services Agency (CBSA).

After lunch, our attention shifted to Customs and Enforcement. Following a sponsor presentation by Michael Cannava, Director of U.S. Government Programs, S2 Global on "integration in the real world" we were delighted to welcome an overview of the future of customs and trade in a digital world from Ricardo Treviño, Deputy Secretary General, World Customs Organisation (WCO).

RICARDO TREVINO, DEPUTY SECRETARY GENERAL, WORLD CUSTOMS ORGANISATION ADDRESSING GLOBAL CUSTOMS CHALLENGES

This was followed by a fascinating panel chaired by Erringer Helbling from Altana and comprising of global experts in Customs and Trade including Ricardo, Peter Swartz, Ernani Checcucci (World Bank) and Frank Heijmann (Dutch Customs) discussing technology and capacity building options and opportunities for Customs Agencies around the world.

PANEL DISCUSSION ON CAPACITY BUILDING OPTIONS FOR CUSTOMS AGENCIES ACROSS THE GLOBE

Day One was rounded off with sponsor presentations from Peter Swartz (Altana) and Prasanna Ellanti (Accenture) followed by a networking drinks reception sponsored by Gatekeeper.

The morning of Day Two focussed more on global developments in border management and technology, rather than those specific to North America. We heard the latest developments on the EU Smart Borders Programme from Luca Tagliaretti, Interim Executive Director, EU-LISA; and how technology has transformed Border Control in Singapore from our good friend Clarence Yeo, Senior Advisor (Special Duties), Ministry of Home Affairs, Singapore.
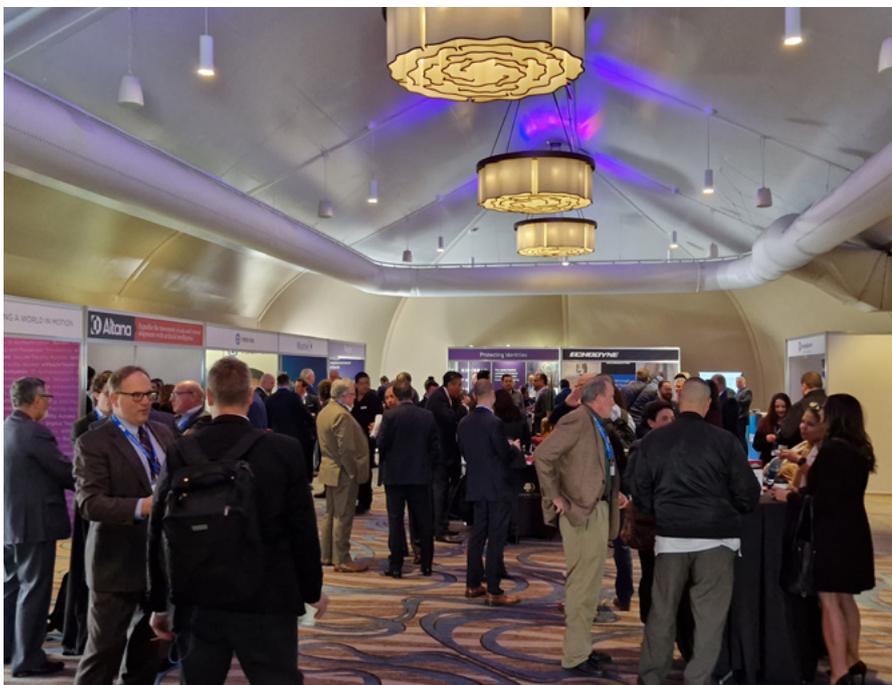
This was followed by a panel discussion hosted by Andy Smith, Director of Government and Industry Relations at SITA discussing the balance between facilitation and border security in the context of tourism with Andrew Wynter, Chief Executive Officer, Passport, Immigration and Citizenship Agency, Jamaica; Yuri Feliciano, Innovation Advisor, Office of the Minister of Tourism and Public Health, Aruba; and Amiel Porta, Manager for Airside & Terminal Operations, San Diego International Airport.

PANEL DISCUSSION ON USE OF TECHNOLOGY FOR PASSENGER FACILITATION AND TOURISM CHAIRED BY ANDY SMITH FROM SITA

ANDREW MEEHAN FROM PANGIAM LEADING A PANEL DISCUSSION ON AIR TRAVEL FACILITATION

We then heard from Gord Wilson at Entrust on latest developments to reduce friction at Marine and Land Borders using technology; followed by a panel discussing the same topic for air travel. This was facilitated by Andrew Meehan, Managing Partner at Pangiam and comprised of Nael Samha, Acting Executive Director of Passenger Systems and Biometrics in the Targeting and Analysis Systems Program Directorate (TASPD), U.S. Customs and Border Protection; Yuri Feliciano; Amiel Porta; and Patrick Sgueglia, Product Manager – Airport Services, Regulatory and Biometrics, Lufthansa Group.

The discussion then turned to managing identities and targeting at borders with a sponsor presentation by Ryan Rawding from Pangiam and a panel discussion moderated by Chris Millar, Chief Executive Officer, Gatekeeper Intelligent Security comprising of Nael Samha; Carolyn Roseberry-Sparkes, Programme Director, Digital Services at the Border (DSAB), UK Home Office; and Fabrizio Di Carlo, Senior Coordinator of Police Data Management, Interpol.

JUDGE ROB BONNER, FORMER CBP COMMISSIONER, DISCUSSING THE EXPLOSION OF IRREGULAR MIGRATION NUMBERS AT THE US SOUTHERN BORDER

SETH STODDER, FORMER ASSISTANT SECRETARY OF HOMELAND SECURITY DISCUSSING THE IMMIGRATION DILEMMA CURRENTLY FACING THE USA, AND HOW TO ADDRESS IT.

The final session of the day turned to the thorny question of irregular migration with presentations from true global experts in this field including my good friends Rob Bonner, Former Commissioner, U.S. Customs and Border Protection and Seth Stodder, Senior Fellow at Atlantic Council, Lecturer in US Law at USC Law School, and former Assistant Secretary of Homeland Security – both of whom have separately written articles in this edition of Border Management Today.

We were also delighted to welcome Commander Dan O'Mahoney from the UK Border Force to discuss the challenge of managing irregular migration by small boats across the English channel and potential policy, operational and technology options to manage this.

This culminated in another excellent panel discussion on how technology can assist in meeting the challenges posed by irregular migration hosted by Ramesh Ramakrishnan, Vice President of Delivery, Secure Government Services, Mastek and comprising of Marc Rapp, Assistant Director, Law Enforcement Systems and Analysis, U.S. Immigration and Customs Enforcement (ICE); Rob Bonner; Dan O'Mahoney; and Seth Stodder.

COMMANDER DAN O'MAHONEY DISCUSSING IRREGULAR MIGRATION ACROSS THE ENGLISH CHANNEL BY SMALL BOATS.

PANEL CHAIRED BY RAMESH RAMAKRISHNAN ON USE OF TECHNOLOGY IN MANAGING IRREGULAR MIGRATION

Our hosts from US Customs and Border Protection were very generous in offering our international delegates the opportunity to take a look behind the scenes at the border crossing point between Mexico and the USA at San Ysidro; as well as a guided.tour with US Border Patrol Agents along the US / Mexico border.
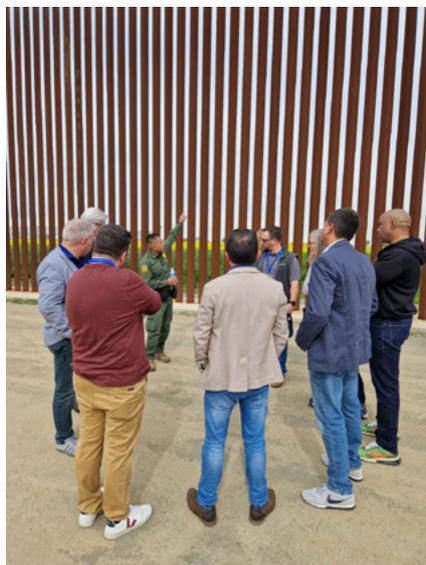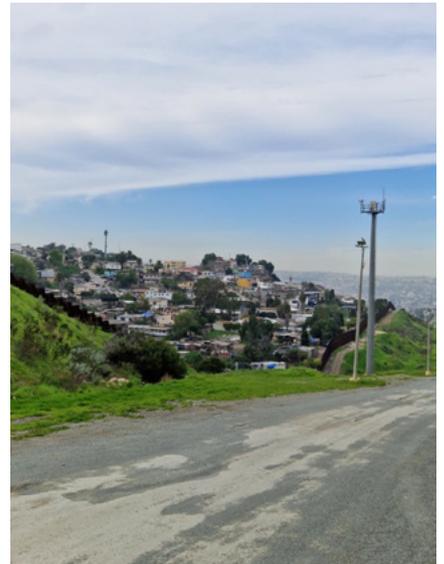
On behalf of the entire IBMATA family I would like to extend my heartfelt thanks once again to all our friends at US Customs & Border Protection for their kind hospitality – I'm sure we will return one day!

BORDER MANAGEMENT & TECHNOLOGIES SUMMIT

MIDDLE EAST 2023

Dubai, UAE
14 – 16 November 2023

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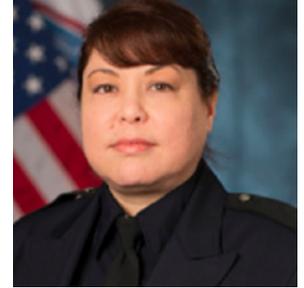
By Jody Hardin
Executive Director, Planning, Program
Analysis, and Evaluation Directorate
Office of Field Operations
U.S. Customs and Border Protection

CBP and the Future of Non-Intrusive Inspection Technology at U.S. Land Ports of Entry

This past February, U.S. Customs and Border Protection (CBP) officers at the Veterans International Bridge in Brownsville, Texas discovered a total of 17.9 lbs of narcotics, valued at nearly $240k, hidden within a 2003 Jeep[1]. With the aid of Non-Intrusive Inspection (NII) systems — enhanced technology to screen cargo and conveyances — CBP officers were able to seize the narcotics, arrest the driver, and turn him over to Homeland Security Investigations.

The case is one of many across the United States. CBP has a diverse and complex mission to protect the American people, safeguard our borders, and enhance our economic security. To ensure a safe and secure inspection process, CBP recognizes the need to pursue advanced technology and strengthen capabilities that support our frontline personnel as they screen

LOW-ENERGY DRIVE-THROUGH SYSTEMS IN BROWNSVILLE, TEXAS.

people, cargo, and conveyances arriving at U.S. ports of entry.

CBP uses NII systems at U.S. land ports of entry to assist frontline personnel in identifying contraband, which includes narcotics, unreported currency, counterfeit items, and terrorist weapons. Contraband is often hidden inside cargo containers, commercial trucks, rail cars, private vehicles, and international parcels. Tragically,

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1   https://www.cbp.gov/newsroom/local-media-release/cbp-officers-seize-239k-worth-cocaine-veterans-international-bridge

CBP also sees other heinous crimes, including cases with stowaways and inadmissible persons, who pay for transit to the United States in hopes of a better life, but end up as victims of human smuggling, or trafficking.

The goal of the NII program is to deliver safe and reliable technological tools that increase the capacity for CBP officers and agents to prevent, detect, and interdict illicit contraband and threats from entering, or leaving the United States. NII equipment allows frontline personnel to review the contents of a cargo container in a matter of minutes where a physical examination would take hours. By increasing our NII capabilities, we further enhance the inspection process to enable CBP officers to make more informed decisions on higher volumes of cargo.

In fiscal year 2022 alone, CBP officers used NII systems to scan almost eight million conveyances, which aided in the interdiction of more than 100,000 pounds of narcotics, approximately $2 million of undeclared U.S. currency, and the identification of 86 illegal travelers. The benefits of using NII systems instead of spending time physically examining this volume results in saving CBP more than $1 billion in annual operations and industry approximately $5.8 billion to $17.5 billion in costs due to shipment delays.

The importance of screening higher volumes of conveyances at the Southwest Border is critical to the safety of the American public. Private and commercial vehicles are the primary and secondary modes Drug Trafficking Organizations use to smuggle narcotics into the United States. Over the past few

HIGH-ENERGY DRIVE-THROUGH SYSTEMS IN ANZALDUAS, TEXAS

years, CBP has seen huge increases in volumes of fentanyl being seized. Each year, millions of Americans die from abusing opioids and illegal drugs laced with fentanyl — and CBP plays a critical role in keeping them from reaching our communities and off the streets.

Approximately 94 percent of seizures and 98 percent of the total pounds of narcotics seized at Southwest Border land ports of entry occur with CBP scanning approximately one percent of private vehicles and 15 percent of commercial vehicles. Given the sheer volume of vehicles arriving at Southwest Border land ports of entry — more than 77 million private vehicles and 6.3 million commercial vehicles annually — the deployment of NII systems will significantly increase the scanning rates without negatively impacting the flow of traffic.

Historically, drive-through NII systems were only in secondary inspection areas. In certain ports of entry, CBP is placing new NII systems in pre-primary so vehicles are scanned before the driver interacts with a CBP officer in primary. The image from the NII scan can then be sent to a Command Center where highly trained CBP personnel conduct an image analysis and within minutes, forward their adjudication results

HIGH-ENERGY DRIVE-THROUGH SYSTEMS IN ANZALDUAS, TEXAS

to the CBP officer in primary. During the interview process in primary, the CBP officer will determine whether the driver will go to secondary for further inspection, or whether the driver can exit the port and fulfill their delivery. The NII program allows CBP to automate processes and provide frontline personnel with tools and information that enable them to quicky and efficiently identify threats without impeding traffic flows, ensuring national security while supporting economic prosperity.

To date, the new NII drive-through systems in pre-primary have been fully deployed at Brownsville, Texas and Anzalduas, Texas. The results have been tremendously successful: CBP is seeing an increase in NII scans from 1 percent to 40 percent for private vehicles — and 15 percent to 70 percent for commercial vehicles.

Over the next few years, CBP will remain focused on deployment of 88 low-energy, 35 multi-energy, and 12 high-energy rail systems, which will be fully deployed at land ports of entry by the end of 2026.

Looking ahead, CBP is working to upgrade NII capabilities with artificial intelligence and machine learning to assist frontline personnel in quickly identifying anomalies in scanned images.

At the end of January, CBP held an Industry Day to discuss the impending NII Anomaly Detection Algorithm procurement.

With the increased volume of cargo, conveyances, and people at U.S. ports of entry, CBP simply cannot continue to try to meet demands with more personnel. With NII, CBP has a tremendous opportunity to streamline processes, which gives our personnel greater flexibility to address evolving threats across all operational environments

and modes of transportation.

Additionally, CBP is leveraging NII technology and exploring artificial intelligence in the small package environment. The small packaging industry continues to grow exponentially and is another channel used for smuggling contraband.

CBP has learned that improving port operations relies heavily on stakeholder partnerships. The biometric entry-exit program successes were dependent on a strong understanding of how our mission requirements interacted with carriers and port authorities in all environments. CBP will continue to work with industry and partners to identify process improvements and technology that can be leveraged to improve the experience of travelers and the trade community at ports of entry.

As CBP adapts and evolves to growing threats, leveraging the expertise, perspectives, and ideas from industry partners is instrumental to the agency in remaining innovative to meet

growing volumes and evolving threats, which greatly impact our economic and national security.

Jody Hardin is currently serving as the Executive Director for Planning, Program Analysis and Evaluation in CBP's Office of Field Operations. In this role, she leads strategy development, operational analysis and business transformation efforts that impact all ports of entry and pre-clearance locations including over 27,000 frontline employees. Ms. Hardin oversees innovation efforts throughout the Office of Field Operations and was instrumental in developing long term strategies for for facial biometrics, pleasure boat and cruise process reengineering. She also leads the technology testing for land border biometrics solutions and the development of the CBP One app. Ms. Hardin began her federal career in 1991 with the Internal Revenue Service and joined CBP as an Immigration Inspector in Honolulu where she served for 17 years before moving to CBP HQ. She holds a B.A in Political Science from the University of Hawai'i.

By Zac Hall,
Business Development Manager
for US and Canada,
Gatekeeper Intelligent Optical
Solutions, Rapiscan Systems | AS&E

A BUSY BORDER CHECKPOINT EMPLOYS
ADVANCED INSPECTION TECHNOLOGIES
TO HELP PROMOTE SAFE AND EFFICIENT
INTERNATIONAL TRAVEL.

Finding the Balance at Borders

ADVANCED, END-TO-END TECHNOLOGY FOR A SECURE AND EFFICIENT OPERATION

International travel can be a time-consuming and frustrating experience for travelers and border security personnel alike. Border agencies must balance security with safe and efficient passenger travel, but quickly and accurately vetting and processing travelers is growing more difficult in light of heightened security concerns, limited personnel, and travel returning to pre-pandemic levels.

Key challenges for agencies include:

1. Long wait times: Long wait times at border crossings are a major source of frustration for travelers, leading to greater volatility and stretching limited security resources to manage the flow of passengers. This is particularly problematic during peak travel periods, when wait times can stretch for hours.

2. Inefficient processes: Relying on manual processes for verifying the identity of travelers is time-consuming, adding to travel delays and diverting valuable security resources from critical duties. Manual data entry is also error prone, resulting in the capture of incorrect or outdated information, which leads to greater security risks.

3. Evolving security threats: Bad actors are vigilant in their pursuit of new techniques to evade border agencies. To combat new threats and sophisticated concealment methods, international border agencies must stay up to date with the latest security technologies to effectively protect their borders.

4. Managing large amounts of data: International travel generates vast amounts of data as border agencies collect several pieces of information from each traveler to verify their identity and track the movement of goods across borders. Agencies need an effective means of capturing and managing the data to help security personnel make fast, informed decisions and create greater efficiencies at border crossings.

To help detect threats and improve the speed, accuracy, and efficiency of processing passengers and vehicles at border crossings, agencies are employing a combination of advanced detection and intelligent optical inspection solutions that leverage artificial intelligence, machine learning, and biometrics technology. For example, facial recognition, license plate recognition, and radio-frequency identification (RFID) technologies assist agencies in improving the accuracy of identity verification in real time, reducing wait times, and streamlining the movement of goods across borders. Additional detection technologies, including X-ray inspection and radiation detection, are also used to scan people, baggage, and vehicles to help uncover concealed threats.

Biometric facial recognition algorithms help verify the identity of travelers by quickly and accurately matching their face with their passport or other identity document. It reduces or eliminates the need for manual checks by border security personnel, speeding processing time for travelers at the border.

License plate recognition technology assists in identifying vehicles of interest by tracking the movement of vehicles across borders to help detect vehicles that are involved in smuggling or other illegal activities. RFID technology streamlines the border crossing process for authorized travelers. For example, an RFID tag can be placed in a traveler's passport or other identity document, allowing border security personnel to verify their identity quickly and accurately as they approach the border. This can help to reduce wait times and increase the efficiency of the border crossing process.

X-ray inspection technologies also employ advanced image analytics to support operators performing image analysis of scanned vehicles and cargo. Image processing algorithms leverage machine learning and deep learning processes to highlight specific threats and contraband in the X-ray images, which allows analysts to focus on suspect areas, saving time during the image adjudication process and maximizing threat detection.

A data integration platform provides a centralized hub for collecting the information provided by these security systems and sensors at each border crossing. By integrating and cross-referencing the data with logistics and intelligence databases, operators get a holistic view of each vehicle and traveler, enhancing their ability to quickly uncover and respond to potential threats. A centralized integration platform also enables complementary inspection systems to work in conjunction with each other so that workflows can be automated, achieving greater efficiency, and improving the accuracy, scalability, and reliability of security operations.

By combining these advanced technologies and employing a comprehensive, end-to-end security solution, international border travel can be a safer, more efficient process for travelers and border security personnel, ultimately enhancing both national security and economic activity.

By John Mears,
VP, Tech Fellow,
Homeland Security Solutions,
Leidos

Secure International Land and Sea Port Designs

The travel and tourism sector is set to grow on average by 5.8% annually between 2022 and 2032, exceeding the 2.7% expected growth in overall GDP.[1] Lingering health concerns, changes in regulations (like Title 42 in the U.S. and Brexit in the UK), as well as challenges in recovering from down-staffing that occurred during the pandemic, all throttled back demand.[2] What became apparent – and was hopefully transient – was the fragility of the system during peak travel times across all modalities – air,[3] land, and sea.[4] Since port real estate expansion is likely to lag travel growth while these external challenges resolve, it is imperative that port designs evolve to accommodate new processes and technologies for faster, safer, seamless international travel. In fact, travellers are making intentional

choices to travel through ports that offer a more modernised, contactless, and improved customer experience consistent across port types. Such seamless travel is facilitated not only by traveler information provided in the port, but also that which is voluntarily provided prior to traveling to the port, often via mobile apps. In this article we examine the state-of-the-art and further enhancements that could improve ports that serve and support pedestrians, cars, cruise ships, ocean containers, trains, and truck or lorry traffic.[5]

PEDESTRIAN PROCESSING

In 2021, on a typical day, the U.S. Customs and Border Protection (CBP) agency processed 491,688 passengers and pedestrians, the majority of which (73.6%) were pedestrians, while 24.7% were air

passengers and crew, and 1.6% were ship/boat arrivals.[6] Increased traffic across all ports that process pedestrians puts pressure on queues associated with immigration and customs processing. In fact, airports and maritime cruise ship ports — although oriented to air and sea travel — essentially process pedestrians at the point where such international travel begins and ends.

Port managers are under increasing pressure to handle more traffic, reduce queue times, and improve the passenger journey without increasing border force personnel. Enrollment in trusted traveler programmes like U.K. Registered Traveller or U.S. Global Entry, helps to reduce the load on immigration officers, but not enough. Additional automation techniques, such as the EU

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1   "Travel and Tourism Economic Impact 2022," World Travel & Tourism Council, August 2022.

2   https://www.bbc.com/news/business-64390979

3   https://www.forbes.com/sites/qai/2023/01/24/meltdowns-in-the-airline-industry-and-how-to-fix-them/?sh=482783491a6b

4   https://news.sky.com/story/delays-for-channel-ferries-could-be-worse-today-as-uk-and-france-argue-over-who-is-to-blame-12657352

5   https://www.leidos.com/insights/automated-borders-supporting-security-and-commerce

6   https://www.cbp.gov/newsroom/stats/typical-day-fy2021

FIGURE 1: GLOBAL ENTRY FACE RECOGNITION TOTEMS AT LAX. PHOTO: LEIDOS GE TEAM

FIGURE 2: FACE RECOGNITION EGATES AT LHR. PHOTO: TRAVELINGFORMILES.COM

Biometric Border System[7] and U.S. Simplified Arrival, must be fully implemented to accomplish the difficult and seemingly conflicting objectives of speed, efficiency, and security. These programmes speed processing by automatically comparing the passenger's face to the passport photo, held either in the passport or in government records. According to U.S. CBP, the accuracy of such face-based systems is around 99.4% on entry, 98.1% on exit, and the system doesn't get tired of looking for imposters.[8],[9] This means that these systems are faster, safer, and more accurate, augmenting border force officers and enhancing overall performance.

Figure 1 (above) shows multiple vendor examples of this technology in use at LAX airport, installed and maintained by Leidos for CBP. The same type of technology is used in pure pedestrian and maritime applications, all with the same operational concept. The passenger presents their face, and their clearance is processed automatically, ideally with no additional screening questions and no printed receipt. However, this could create a new bottleneck at the CBP officer's

station near the exit. By policy, an officer needs to 'eyeball' every traveller, even trusted travellers, as they exit the immigration area. But for this policy, exiting the area could be automated, further speeding the process. A good example of is the immigration area at LHR airport, shown in Figure 2 (above). In this

case, the face-based immigration clearance and the automated exit into the baggage claim area are combined, with only general ground staff monitoring of the row of eGates, mostly to ensure smooth flow, assisting any travelers with difficulties and directing them to Border Force officers if necessary.
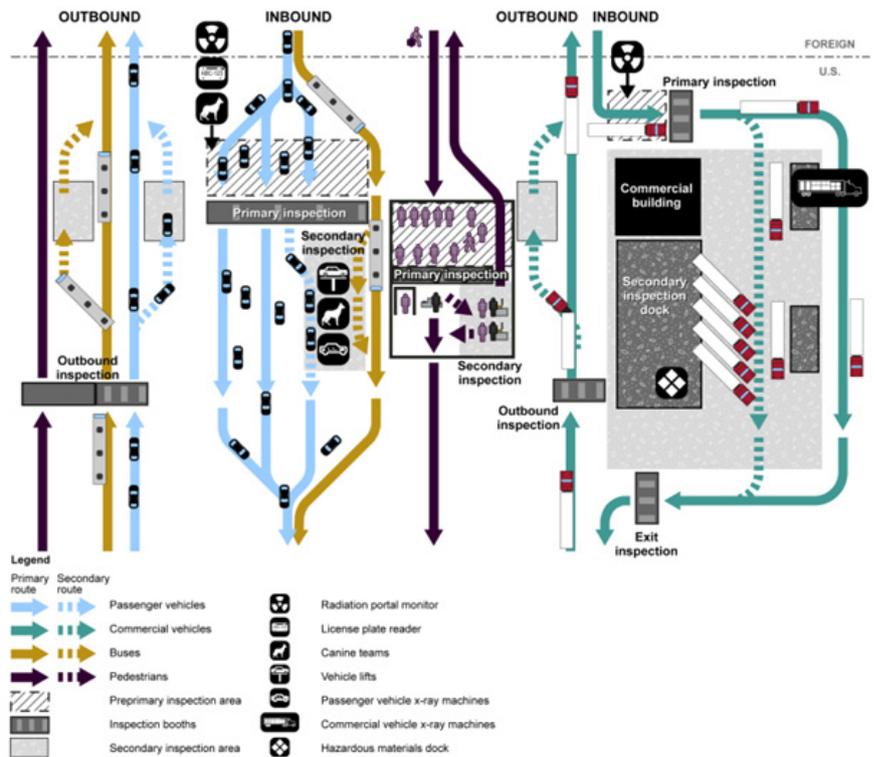
FIGURE 3: CANONICAL LAND BORDER PORT. ILLUSTRATION: GAO-19-534 REPORT

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7   https://www.bbc.com/news/business-64311737

8   https://www.cbp.gov/about/congressional-resources/testimony/statement-record-assessing-cbps-use-facial-recognition-technology

9   Since inception of face reco, CBP has caught 1592 imposters. Stated at the FedID conference by Nael Samha, 9/9/2022.

FIGURE 4: INBOUND PERSONALLY OWNED VEHICLE CROSSING DETAIL. ILLUSTRATION: CBP, LEIDOS ADDITIONS
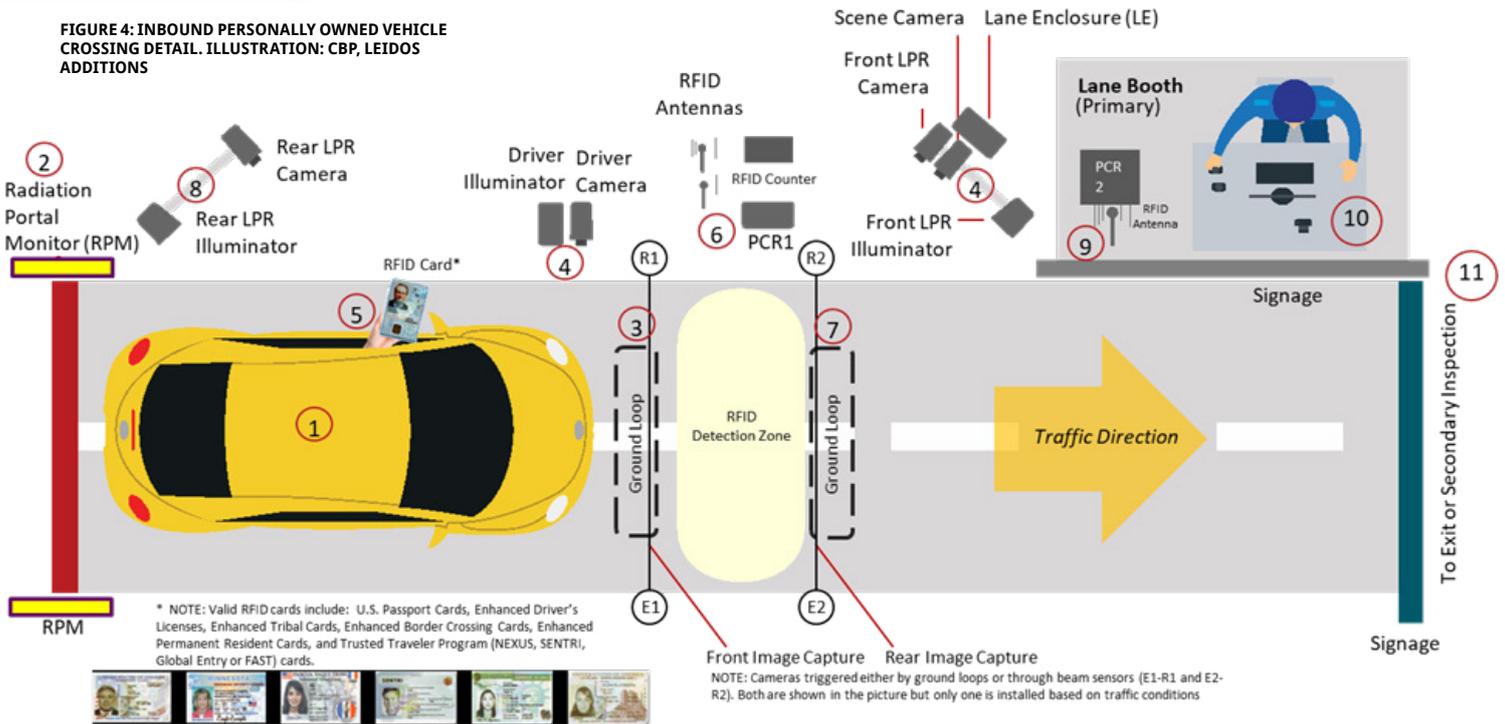
LAND BORDER PORTS

U.S. CBP indicates that on a typical day in 2021, 89,458 truck, rail, and sea containers were processed along with 159,598 incoming privately owned vehicles, $7.6 billion worth of imported products, and 101,000 entries of merchandise at U.S. air, land, and seaports of entry.[10] This is a challenging volume that will only increase from this point. A typical land border port, schematically illustrated in Figure 3 (previous page), must process both inbound and outbound personally owned vehicles; pedestrians; and commercial lorries, safely, thoroughly, and without undue queue formation.

Figure 4 (above) schematically represents the personally owned vehicle lane and associated sensors in the area leading to a CBP officer's primary inspection booth. Before an inbound vehicle arrives at the officer's booth, it is checked for radiation using fixed radiation portal monitors,[11] licence plate readers scan front and rear license plates, and any of the valid border crossing cards are read through their RFID (radio frequency identification) chips. Cameras also capture the scene and the driver, and the officer has the option to use an additional camera and RFID reader in their booth. However, the objective is to capture as much information about the approaching vehicle and occupants as possible prior to arrival at the booth. This information is packaged for transmission to a central screening system, which responds to an application on the officer's desk with information that they use to accomplish the primary inspection for passage into the country or aid in deciding whether to send the vehicle to a secondary inspection area for further analysis.

Leveraging sensors and information gathered before the vehicle arrives at the primary booth speeds processing and enhances officer safety by identifying vehicles or passengers that potentially pose a threat. Given that people and contraband can be hidden in vehicles, the strategic intention of U.S. CBP is 100% non-intrusive inspections of all vehicles using low-energy x-ray portals in the pre-primary area.[12] Such low energy portals don't require the passengers to exit the car during use, and they meet ANSI (American National Standards Institute) standards for safe occupied vehicle scanning.[13] This facilitates collection of important data such as the total number of people in the vehicle, whether hidden or not. Higher power selectable multi-energy portals are useful for larger vehicles like tractor-trailer combinations, ocean containers and train cars, and are gaining in popularity for such inspections.[14]

Currently, non-intrusive inspection (NII) with x-ray systems

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10   https://www.cbp.gov/newsroom/stats/typical-day-fy2021

11   https://www.leidos.com/products/exploranium

12   https://www.leidos.com/insights/us-customs-and-border-protection-awards-leidos-over-200-million-provide-screening-portals

13   https://www.leidos.com/products/vacis. See for example VACIS XPL.

14   https://www.leidos.com/insights/us-customs-and-border-protection-selects-leidos-multi-energy-portal-inspection-contract

such as Leidos VACIS®, use trained people in central port control centers to screen the images and convey identified contraband and threats to the officers in the lanes. Moving forward, there is a focus on automating contraband detection using machine-learning-based image analysis.[15] Functions such as empty container verification, anomaly detection, and plausible match-to-manifest are under development at Leidos, and U.S. CBP has held an Industry Day preparatory to a procurement for the automated capabilities.[16] These capabilities enable border officers to focus on primary inspection tasks and speed processing whilst reducing costs.

Even with these promising advancements, challenges at land border crossings still exist. There is no passenger manifest associated with land borders as exists for air passengers. Trusted traveller and mobile apps for pre-registration of land border passage are offsetting this apparent disadvantage. Constrained border port land area poses challenges when it comes to installation of new technology like x-ray NII. For instance, if the x-ray NII systems in pre-primary are too close to the radiation portal monitors in the primary area of Figure 4, the x-ray systems can cause false triggering of the radiation monitors. Multiplexing of the

sensors is an option, but this option is less desirable to border forces because any multiplex delay (even a two second delay) can impact the queues. Besides restructuring the ports, more coordination between one country's exit and the next country's entrance could yield a solution to such challenges.

Capturing faces in vehicles for biometric verification of identity is also challenging for land and ferry ports dealing with vehicles, both personal and commercial. Lighting, obscura (like vehicle A-pillars, sun visors, masks, sunglasses), glare, and uncooperative passengers impede the ability to carry out effective face image captures for

FIGURE 5: CONCEPTUAL ADVANCED CONTAINER AND FERRY PORT DESIGN. ILLUSTRATION: LEIDOS

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15   https://www.pnnl.gov/projects/non-intrusive-inspection-and-detection-border-security

16   https://www.defensedaily.com/cbp-to-host-industry-day-for-nii-anomaly-detection-algorithms/homeland-security/

all occupants. If full automation of entry lanes is to be effected, likely only for trusted travelers, then all sensors must operate reliably and in concert to both facilitate flow and minimise risk.

Leidos currently provides automated gate entry capabilities at U.S. Army bases through the Automated Installation Entry (AIE) Program of Record.The AIE programme[17] includes features similar to those required for land port passage, including pre-clearance authentication, biometric-based identification including facial recognition of vehicle occupants, RFID readers, and a licence plate reader option.

CRUISE SHIP AND FERRY PORTS

Significant advantages are being realised by leveraging facial recognition, as evidenced by processing of cruise ship passengers during debarkation, which is around a third faster than more traditional means and can be extended to pedestrians disembarking ferries. However, processing vehicles being driven off those ferries requires a different process. To achieve this efficiently, especially in UK ports post-Brexit, changes will be needed in port design to accommodate the automation and new sensors to facilitate flow while enforcing customs, immigration, and security rules. Fortunately, advancements and lessons learned from land border ports, as previously described, can easily be applied, if the port design can be changed to accommodate them.

Figure 5 (previous page) shows the concept of a modern container port on the left adjacent to a modern ferry port on the right. The white covered building structures shelter the primary inspection locations for the border force officers. The vertical yellow panels straddling the lanes are radiation portal monitors. Beyond that, there are gantries that house the multi-energy portals for containers and the low-energy portals for privately owned vehicles exiting the ferries. Not shown are the number plate readers, RFID readers for border crossing cards or passports, facial recognition cameras, and QRC or bar code readers for manifest or bill-of-lading verification of the containers. This design facilitates automated processing of cars and container lorries, except for any mandatory interaction with border force personnel. Non-compliant or suspect vehicles would be directed to a secondary area, not shown in this figure.

SUMMARY

As a new age of international travel dawns, permanent changes—some due to COVID, others due to new laws and policies—will impact the associated processes. We now have tech-based options and process flows available to make passage through international ports safer and more efficient. Touchless self-service, seamless passage, and uniform treatments across port types are possible with the innovations cited here but require collaboration[18] to adapt travel policies and technologies to enable improved travel experiences that are safer and more secure for everyone.

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Mr. Mears holds B.S.E.E. and M.S.E.E. degrees from the University of Florida and is certified as a Project Management Professional. He is an Associate Member of the American Academy of Forensic Sciences, and a member of the Biometrics Institute. He has served on a number of Boards of Directors, and is currently Chairman of the Board of the International Biometrics and Identity Association (IBIA).

17   https://www.army-technology.com/news/newsus-army-awards-99m-aie-3-contract-to-leidos-4979395/#:~:text=The%20AIE%2D3%20contract%20will,resource%20optimisation%2C%20the%20company%20said

18   https://www.leidos.com/insights/why-collaboration-holds-key-co-ordinated-border-management
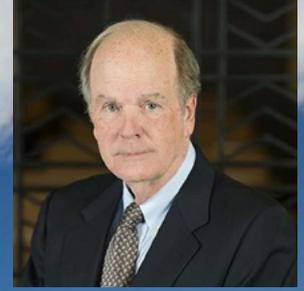
By Robert C. Bonner

Tackling human smuggling at the U.S.-Mexico Border: Can anything be done?

The purpose of this article is to describe what is currently happening at the U.S. border with Mexico in terms of unlawful or "irregular" migration, and then consider what steps the U.S. government could take to reverse it? Before I make any suggestions about what could be done, let me try to capture the very real crisis at our land border.

The issue of the United States controlling and securing its borders is not, in my mind, a partisan issue. It is a policy issue; an extraordinarily important policy issue. And I believe the policy issue is a no brainer: America, as a sovereign nation, should control its borders like every other nation on earth does.

THE CRISIS AT THE U.S. BORDER

There is a "crisis" at our border, - - and "crisis," which is defined as "a time of intense difficulty or trouble when important decisions need to be made," is unquestionably an appropriate term to apply to what is happening there.

This crisis - - and especially its causes - - are not well understood. If you just rely on the media or listen to the political rhetoric emanating from Washington, you are not going to have a very good idea of what the problem is, much less how to fix it.

But it is a crisis involving an extraordinary, unprecedented increase in the number of foreign nationals unlawfully and without authorization crossing the land border with Mexico into the United States.

Needless to say, I am not talking about the foreign nationals entering lawfully on visas through our authorized ports of entry. U.S. Customs and Border Protection (CBP) operates 44 ports of entry, or official entry points, along its land border with Mexico. I am talking about the mass, irregular migration of those entering the U.S. by crossing between the ports of entry, often in rugged or desert terrain or on rickety rafts across the Rio Grande. This is the area patrolled by CBP's Border Patrol Agents.

12-YEAR TIMELINE OF BORDER PATROL APPREHENSIONS/ENCOUNTERS AT THE U.S. SOUTHWEST BORDER

The graph below captures the magnitude of the problem.[1] It shows a timeline of the annual total of apprehensions by the Border Patrol going back twelve years, to FY 2011.

Let me define three terms used in the graph shown below.

1. As you can see at the top of the graph, it refers to Border Patrol "encounters." "Encounters" means actual apprehensions, at least temporary custody and booking at a Border Patrol station. Booking includes fingerprinting, photographing, and interviewing the illegal border crosser, whether the Border Patrol caught that person or, as is more and more often the case, that person surrenders to the Border Patrol.

2. The "Southwest Border" is our entire 2,000 mile border with Mexico.

3. "Fiscal Year." The U.S. federal government operates on a "Fiscal Year" that ends on September 30.

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1 All data points in this article are drawn from official data of U.S. Customs and Border Protection found at https://www.cbp.gov/newsroom/stats

U.S. Border Patrol Encounters
Southwest Border (SWB) Sectors by Fiscal Year

* Estimated 3 million encounters for FY 2023
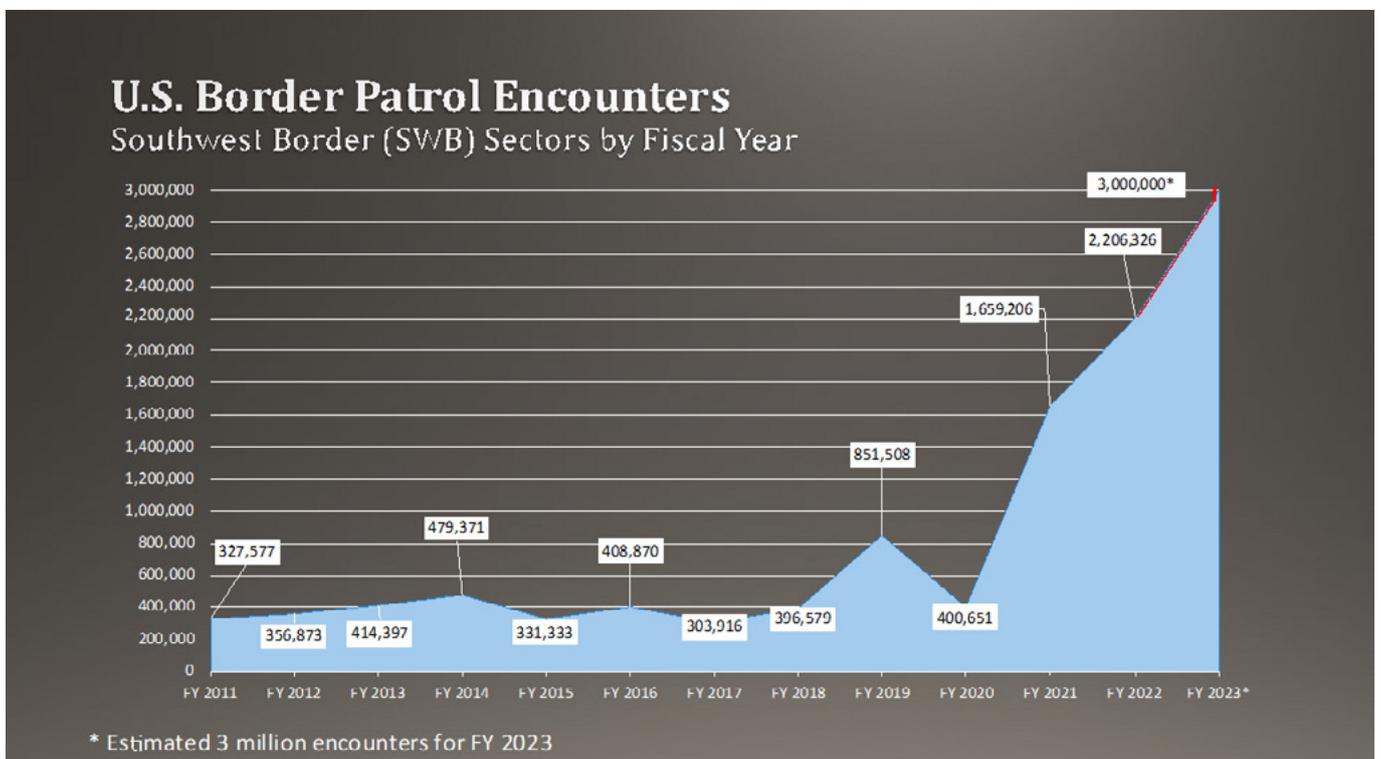
BORDER PATROL APPREHENSIONS OVER THE LAST TWO YEARS

Focusing your attention first on the last two years, the total number of foreign nationals apprehended by CBP's Border Patrol in FY 2021 was **1,659,206**.

The total number for FY 2022 increased to **2,206,326**. This means that for the 12 months ending September 2022, over 2.2 million aliens were apprehended by the Border Patrol along and proximate to our border with Mexico.

CBP Enforcement Encounters on Southwest Border
Fiscal Year 2023 totaled 717,660*

Total Enforcement Encounters FY23 as of January 4, 2023

*Total includes both United States Border Patrol and Office of Field Operations encounters
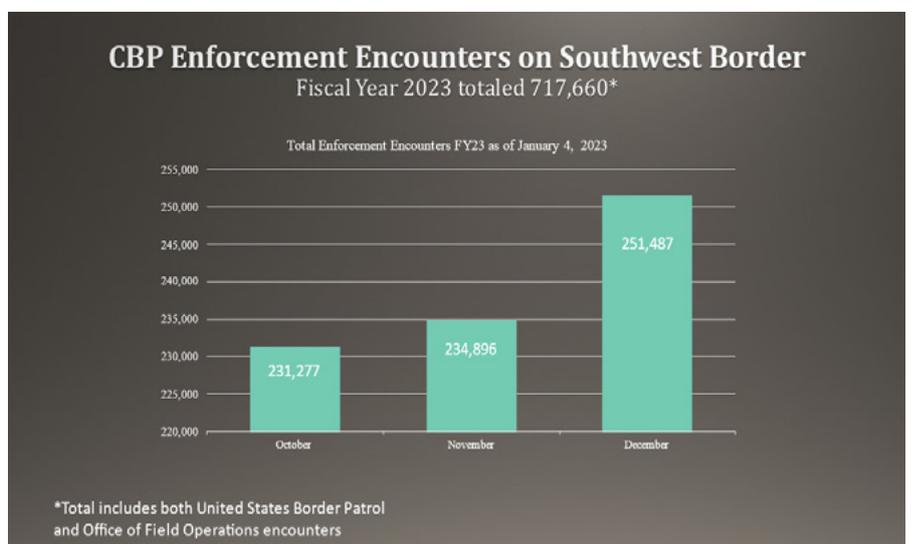
We only have data for the first 3 months of the current fiscal year, but it doesn't get any better. Apprehensions in October and November of last year exceeded 200,000 per month, and in December the number for apprehensions at the Southwest Border was **251,797** - - the largest number of monthly apprehensions ever.

Extrapolating from the first three months of FY 2023, unless something is done soon, apprehensions will likely reach **3 million** this fiscal year.

BREAKDOWN BY SINGLE ADULTS, FAMILY UNITS AND UNACCOMPANIED MINORS

Let me define a few more terms to better understand the data. Individuals --- illegal aliens crossing our borders – are broken down into three categories: Single Adults, Unaccompanied Minors (under 18) and "FMUA", which means "family units," typically one parent, usually with just one of their children.

Well, we hope that it is a parent, but unfortunately up to 15% of the time based on rapid DNA testing, the adult is not the parent. As a result of badly misguided U.S. policy, rent-a-child is now a sad part of the smuggling organizations' services.

The graph below shows a breakdown of the 2,206,436 Border Apprehensions in FY 2022, broken down by Single Adults (1,574,361 or 71%), adult with child Family Units (482,362 or 22%), and single, unaccompanied minors (140,003 or 6%).

U.S. Border Patrol Encounters in Southwest Border Sectors
Fiscal Year 2022 totaled 2,206,436

USBP SWB Encounters by Demographic
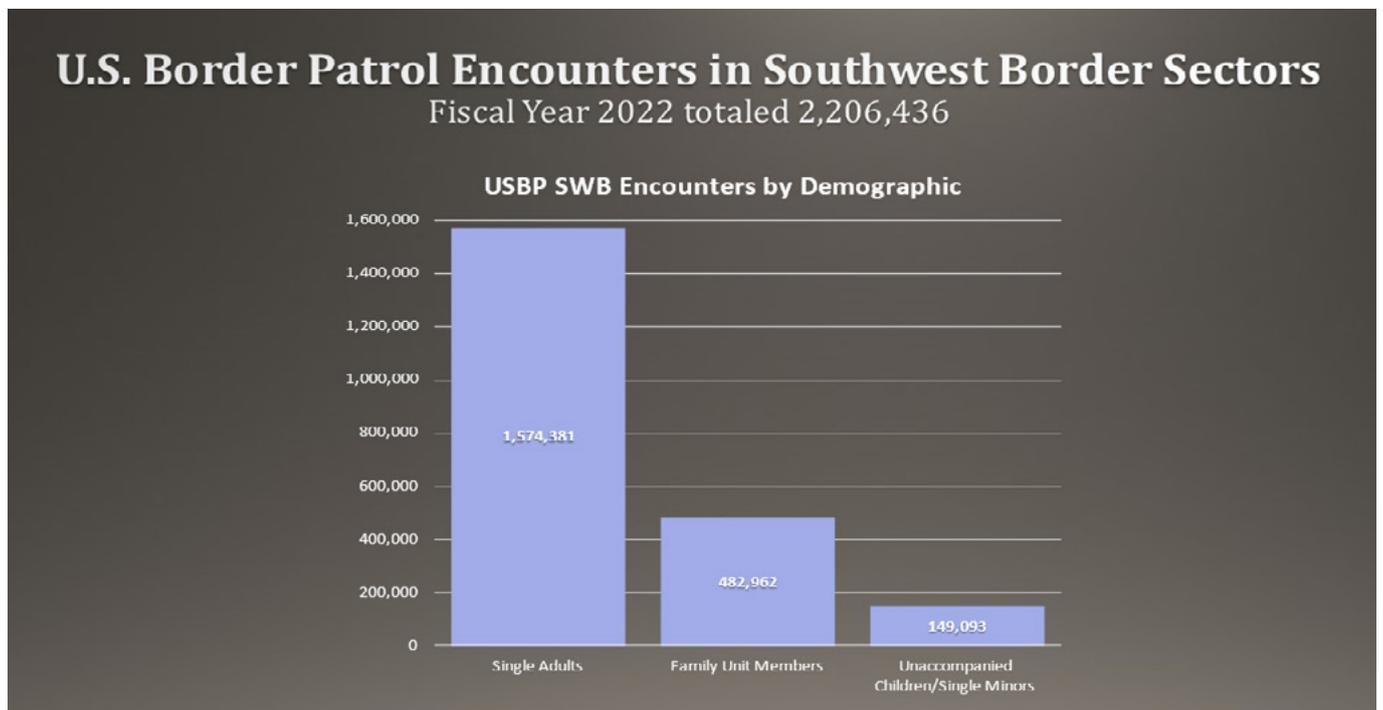
BREAKDOWN BY NATIONALITIES

I am often asked what the breakdown is by nationality. This of course evolves from year to year somewhat. But if you go back a couple of decades, in FY 2000 95% of the illegal crossers were single adults who were Mexican nationals. There were virtually no family units. By FY 2019, the percentage of Mexicans was down to less than half of the total, 392,000 of 851,000 which was just about the same as the Northern Triangle countries,

which surged to 416,000 that year, largely fueled the U.S. prompt release of Family Units from those nations. Other than Mexican and Northern Triangle citizens, all other nationalities were a mere 43,000, or 5%, in FY 2019. Fast forwarding to FY 2022, as you can see "Other", is now 25%, and not 43,000, but a whopping 800,000+, or almost 40% of the total. "Other" includes 150 different nationalities with sizeable increases in Nicaraguans, Cubans, Haitians, Venezuelans, Colombians, and also a fair number

of Chinese, Middle Easterners, etc.

The U.S. government recently announced that it will grant 360,000 humanitarian paroles (30,000 per month) to nationals of four countries: Nicaragua, Cuba, Venezuela, and Haiti. Such paroles include a permit to work in the U.S. If a national from one of these four nations has a "sponsor" in the U.S., they can apply online for one of these slots and be admitted through a U.S. port of entry. (There are early indications that a "sponsor" can be obtained for a cost of up to

U.S. Border Patrol Encounters in Southwest Border Sectors
Fiscal Year 2022 totaled 2,206,436
Demographics to include Country

	Single Adults (SA)	Family Member Units (FMUA)	Unaccompanied Children/Single Minors (UC)
El Salvador	50,580	26,288	16,328
Guatemala	133,772	33,935	60,513
Honduras	97,103	64,903	37,180
Mexico	689,528	23,302	25,950
Other	603,398	334,534	9,122
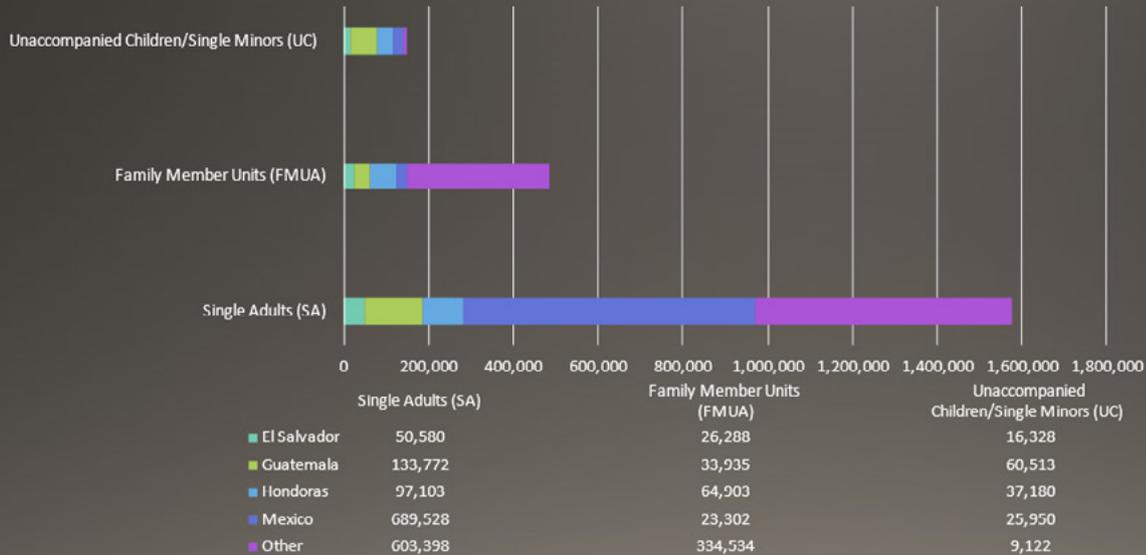
$10,000.) The applicants can apply from Mexico or wherever in the world they are. While the program may discourage some migrants from making the hazardous journey north, over time this program is unlikely to reduce the flow of irregular migration from these countries. Indeed, it will likely have the opposite effect, and add to the number of people leaving these countries for the U.S.

LACK OF CAPACITY TO DETAIN AND SHELTER

The Border Patrol stations - - there are 76 stations somewhat inland of the border -- have space to temporarily hold apprehended aliens, but because they are all over capacity, and the U.S. government agency responsible for longer term detention, ICE, has no space, nearly all of these aliens are being released into the U.S. within 24 hours or less. [2]

Well, all except those who are excluded from the U.S. under Title 42 authority, the authority to exclude aliens during a pandemic.

The Border Patrol advised us all family units are being promptly released by them. Regarding Single Adults, 65% of apprehended adult aliens are being promptly released in the U.S. with a Notice to Appear (NTA). About 35% of single adults are still being returned to Mexico under Title 42 authority.

While the U.S. Supreme Court has stayed the Administration's efforts to end expulsions under Title 42, this authority will surely end in the next couple of months, and the U.S. badly need a strategy to replace it, or the crisis will become even worse. Indeed, the Biden administration has announced that Title 42 authority to exclude aliens illegally crossing our border will end in May 2023.

1.6 million, 2.2 million and a projected 3 million seem like very

large numbers. And they are. Currently, so far in FY 2023, the Border Patrol is apprehending over 8,000 persons a day who have illegal crossed our Southwest border. That is 350 illegal aliens every hour crossing our border. To say that the U.S. Border Patrol has a difficult job is understatement. With these numbers, the Border Patrol is overwhelmed and unable to perform its primary mission of securing our nations border against drugs, potential terrorists, and illegal aliens with criminal records.

BORDER PATROL APPREHENSIONS FOR THE PAST 12 YEARS

Going back to the Figure 1, it shows total Border Patrol apprehensions going back 12 years. Although not shown, from about FY 2005 the number of apprehensions began to steadily fall as the number of Border Patrol Agents increased,

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2   Unaccompanied minors, mainly teenagers from other than Mexico, comprise approximately 6% of the total. After apprehension by the Border Patrol, all of them are transferred to the Office of Refugees and Removal (ORR) with the U.S. Department of Health and Human Services. Most of these teenagers are relatively quickly placed with a "sponsor" or relative in the U.S. Because of U.S. law, none of them are being repatriated to their countries of origins. Sadly, some of these teenagers, as reported by the New York Times on February 26, 2023, are being exploited by these "sponsors."

doubled as a result of a decision by President George W. Bush in 2005, from about 10,000 to over 20,000. With this increase in Border Agents, although the build up understandably took several years, coupled with the use of much improved detection technology, the apprehension rate went up and the numbers of apprehensions began to drop dramatically, reaching a low of 327,000 in FY 2011. By the beginning of the last decade, the U.S. was, in fact, on the verge of gaining actual, honest-to goodness control of our border.

The number of apprehensions remained between 300 ,000 and 400,000 for 8 years, until FY 2019.

The first hill on Figure 1 represents the border crisis of FY 2019, and it was a crisis, caused mainly by sharp increase in Family Units, but still the total for that year, as bad as it was, was **851,508**.[3]

Until 2 years ago, we had not seen a number above 1 million in the past decade and a half.

A large percentage of the current irregular migration are family units, i.e., an adult with a child crossing the U.S. border illegally. Family Units comprise nearly 1/4th of the total. But on top of the FMUA increase, there has also been a sharp increase in single adults, which constitute approximately 70% of the total.[4]   Why?

As the numbers have become more acute, overwhelming the Border and our government's capacity for detention, all family units and most single adults are now being promptly released into the U.S.

There is very little capacity to detain family units, and a single adult need only utter the word "asylum" to be released into the US. With these numbers, there is no capacity to detain them until their asylum claim is adjudicated or even until a credible fear interview is conducted, and no effort is being made to do so.[5]

As the U.S. government releases them, the word, facilitated by cell phones and alien smuggling organizations, quickly spreads back to the countries of origin, which causes ever larger flows of unlawful migration – 400,000 to 1.6 million to 2.2 million and counting. In other words, U.S. policy, or lack of policy, is causing the vast increase in the number of family units and single adults leaving their countries of origin, or other countries in which they have alighted (Haitians from Brazil; Venezuelans from Colombia) and making the perilous journey.

Because of these overwhelming numbers, America has lost control of its southern border with Mexico. And does not seem to know what to do.

GOTAWAYS

The Border Patrol apprehensions tell us a lot about what is going on at the border, but that data does not tell us how many "gotaways" evaded Border Patrol apprehensions.

The Border Patrol estimates that there were at least 600,000 gotaways last year. That is in addition to the well over a million or more who surrendered to the BP and were released.

When I asked the Border Patrol recently why so many gotaways, it was explained that when Border Patrol Agents are absorbed with just processing huge numbers, they are pulled away from the line. Apprehension rates have fallen dramatically. The smugglers are getting a greater percentage of illegal aliens through and around the Border Patrol. A significant number of these are aliens who have been previously deported, removed or have criminal records. Indeed, according to the Border Patrol, 10% of those apprehended by them have a prior criminal record during previous illegal stays in the U.S.. Moreover, the border is vulnerable to potential terrorist penetration as well as more illegal drugs, e.g., meth, heroin and fentanyl, getting by the Border Patrol.

In the San Diego sector, one of the least impacted sectors, the Border Patrol has not been able to operate or staff any of the interior checkpoints, which are a second line of defense against illegal migration, for 5 months. They have fewer agents available to patrol or follow detection leads. This is true for all nine sectors along our border with Mexico.

What else do you need to know to make sense of the numbers? Let me offer a couple of things.

REASONS FOR THE SHARP INCREASE

The most significant reasons for the huge numbers of illegal aliens that we are seeing - - the magnet- - are:

1. The perception that our border is open, that you need only need to surrender to a Border Patrol Agent and you will be quickly released.
2. The decision in March 2021 of

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3   The sharp decline in last three months of FY 2019 was largely the result of the MPP (Remain in Mexico) Program. Under MPP, asylum claimant apprehended unlawfully crossing the U.S. border were returned to and required to stay in Mexico while their asylum claims were adjudicated. This put an abrupt halt to Family Unit migration, until March 2021, when the government of Mexico stopped accepting family units under MPP or Title 42.

4   This is the based on the first two months of FY 2023, In FY 2022, FMUAs were 22% (482,962); SAs 72%. In FY 19, 56% (473,682) of the 850,000 were FMUAs; 35% SAs. In FY 12, SAs were 90% of the apprehensions. FUs 3%, or 11,116.

5   This means that expedited removal, one of the most effective tools against unlawful entry, is not being used. It requires a credible fear interview and determination and at least temporary detention before release or. If no credible fear is found, return to country of origin. Also, temporary detention is needed in order to arrange air transport of those appropriately removed because they do not claim asylum or have no credible fear of persecution in their country of origin.

the Mexican government not to accept family units denied entry under Title 42 or under the Remain in Mexico policy.

3. The inability to detain the overwhelming surge in the number of single adults and the continued absence of virtually any capacity to detain family units.

4. And the absence of any consequences for illegally crossing the border.

If a person is from Central America or, elsewhere in Latin America, or frankly, any place else in the world, if they have a minor or claim asylum, they are virtually guaranteed entry into the U.S. They are being given a Notice to Appear (NTA), what some cynically refer to as "a notice to disappear," and released. The NTA has no appearance date; only "TBD" – "To Be Determined." The place is the U.S. Citizenship and Immigration Services (CIS) office in the state that the alien tells the Border Patrol they are going to. In other words, the notice is to report there on a date to be determined in the future.

The exception is that some percentage, currently about 35%, of single adults are being returned to Mexico under Title 42. They are not Mexicans, and in many cases they will try again, with the aid of the smuggling organizations they have paid, until they evade the Border Patrol and become "gotaways."

As to those the Border Patrol apprehends, in the vast majority of cases, within 24 hours or less - - there is no space to hold them longer[6] - - the Border Patrol transports them to border area shelters, run by NGOs which receive U.S. federal funding to pay for the transportation to areas of the U.S.

that the apprehended/released alien is interesting in residing. In that way, they are moved out of the border cities, like El Paso or San Diego. Of course, as is more and more the case, these shelters are often overrun and over capacity, and then the Border Patrol has no choice other than to release the aliens on the streets of these border cities.

ROLE OF HUMAN SMUGGLING ORGANIZATIONS

Let me add one thing of great importance to understanding the border crisis that I have not mentioned: the role of the human smuggling organizations and their networks, organizations based in Mexico but which have networks with tentacles in Guatemala, Honduras, Colombia and other areas of the world, and their outsized role in illegal migration. They recruit people to make the trek to the U.S. with the promise that, for a large fee, they will get them in.

Their role is huge. These criminal networks, with ties to the Mexican drug cartels, are prime drivers of illegal migration. It is, they have discovered, more profitable and easier than moving drugs into the U.S.

Let me put it simply: if you are a non-Mexican migrant, say from Central America or elsewhere, you cannot move through Mexico or cross the border without paying a smuggling organization, typically thousands of dollars.

These criminal organizations exploit every physical weakness at our border and every legal weakness of our laws. In particular, the smugglers are exploiting our asylum laws. And they will continue to do so until resources

are provided to detain and expedite the processing of asylum claims.

It is not a wall that we need. But we do need to fix our broken asylum system.

And we need to provide for detention of virtually all single adults and, and for humanitarian reasons, humane detention and shelter for family units. Not only is this the right thing to do, as a matter of policy, but it will also sharply reduce the numbers who are making this perilous journey.

The whole immigration issue has become entirely too political. All I ask is, let us examine and try to understand the facts. And let us make wise policy choices based on facts.

Robert C. Bonner is a former Commissioner of U.S. Customs and Border Protection.

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6 The Border Patrol has no choice, because ICE ERO, which is supposed to take custody from the Border Patrol, lacks detention space, and evidently has made little or no effort to expand their detention capabilities. Based on my experience, some period of detention is absolutely essential to establish a deterrent against unlawful migration. It is also needed in order to make sure aliens released are appropriately settled and not exploited.

By Seth Stodder

The Disaster of America's Immigration System

In the words of John F. Kennedy, the United States is a "Nation of Immigrants." With the exception of those exclusively of Native American ancestry, we're all from somewhere else – and America's unmatched dynamism, economic prosperity, technological innovation, and global power simply would not have been possible without the contributions of each generation of immigrants arriving here from every corner of the world.

But we are also a country of laws, and the American people have a right to expect their enforcement, a secure border, and an efficient, well-functioning, and fair immigration system that meets the country's needs and respects human rights.

Sadly, however, we don't have one. America's immigration system can only be described right now as a disaster. Most of the public focus has been on the massive surge of irregular migrants to the U.S.-Mexico border, but this should be seen as symptom of a broader disaster – namely, the collapse of the U.S. immigration system over the last couple of decades. This collapse has two key components:

(1) its failure to meet America's economic or societal needs; and (2) its failure to fairly and efficiently process asylum claims. The combination of these two things has led directly to the massive surge of migrants to the border, and it has created both a border security and humanitarian crisis, with the most vulnerable migrants – including tens of thousands of young children – left to mercy of vicious human smuggling and trafficking gangs and, as we are finding out so vividly now, forced child labor under our noses right here in the United States.

1. THE U.S. IMMIGRATION SYSTEM IS NOT MEETING AMERICA'S ECONOMIC OR SOCIETAL NEEDS

America's economy is facing chronic labor shortages, with the U.S. unemployment rate now at 3.4% - the lowest rate since 1969. According Federal Reserve Chairman Powell, this is in part due to a "plunge in net immigration" since the pandemic.[1] Giovanni Peri, the Director of the Global Migration Center at the University of California at Davis has estimated that, based on pre-pandemic migration trends, the

U.S. is short roughly 1.7 million legal immigrants – and that even though legal immigration is picking back up, it will take at least four years for the U.S. to make up that ground.[2] As a result, the U.S. Chamber of Commerce has recently estimated that there are currently over 10 million job openings in the United States – but only 5.7 million unemployed workers able to take those jobs.[3] There are now major labor shortages in the leisure, hospitality and food service sector, retail, healthcare and social assistance, and manufacturing – all areas where immigrants and foreign guest workers have traditionally been employed.[4]

In addition, the United States is facing serious demographic challenges. In 2021, the U.S. Census Bureau reported that the U.S. population was 331.5 million – an increase of just 7.4% from the 2010 figure, the second-slowest rate of population growth in U.S. history (the slowest being the Depression-era 1930s).[5] This is primarily because of the aging of the Baby Boomers, which – by 2030 – will all be over 65. And by 2034, for the first time in our history, Americans over 65 will outnumber children.[6] The Congressional Budget Office has assessed that, absent immigration, the U.S. population will start shrinking in 2042, as the population ages and we begin to have more deaths than births.[7] Bottom line – the U.S. needs immigrants and foreign workers, or else there will be few young people to power the U.S. economy, produce the next generation, and pay the Social Security and Medicare costs

of the Baby Boom generation.

Unfortunately, however, our antiquated immigration laws – and our overwhelmed immigration system – are not equipped to meet America's needs. For one, the statutory caps on H-1B (skilled foreign worker) and H-2B (unskilled non-agricultural laborer) visas were set years ago and are unreasonably low, compared to what our economy needs. While the H-2A agricultural visa program is uncapped, it is beset by bureaucratic rules making its usefulness challenging for too many farmers. Immigrant visa programs offer similarly limited pathways – and no pathways for unskilled workers. In addition, the visa system is overwhelmed by backlogs – in many countries, such as Mexico and India, the wait time for obtaining a consular interview for various types of visas is as long as 2 or 3 years.

Simply put, the current immigration system is not meeting our country's needs – and requires deep reform.

2. THE ASYLUM SYSTEM'S BREAKDOWN HAS CREATED A WIDE-OPEN DOOR FOR IRREGULAR MIGRATION ACROSS THE SOUTHWEST BORDER

In the wake of 9/11, the U.S. dramatically increased funding for border security – increasing the number of CBP Border Patrol Agents deployed on the U.S.-Mexico border to 20,000, and funding the deployment of fences and myriad sensors. In addition, the Bush and Obama Administrations got tougher on illegal immigration, imposing serious consequences for illegal entries in an attempt to deter migrants from trying to sneak in.

By Fiscal Year 2012, U.S. authorities were patting themselves on the back for supposedly gaining "operational control" of the border, with total Border Patrol apprehensions at the U.S.-Mexico border just over 350,000 – down from the Fiscal Year 2000 peak of nearly 1.7 million. Of course,

2   Abha Bhattarai & Lauren Kaori Gurley, "Trump, Covid Slowed Down Immigration – Now Employers Can't Find Workers," The Washington Post (Dec. 15, 2022).

3   Stephanie Ferguson, "Understanding America's Labor Shortage," U.S Chamber of Commerce (Feb. 22, 2023) (https://www.uschamber.com/workforce/understanding-americas-labor-shortage).

4   Stephanie Ferguson, "Understanding America's Labor Shortage: The Most Impacted Industries," U.S. Chamber of Commerce (Feb. 22, 2023) (https://www.uschamber.com/workforce/understanding-americas-labor-shortage-the-most-impacted-industries).

5   Tara Bahrampour, et al., "2020 Census Shows U.S. Population Grew At Slowest Pace Since the 1930s," The Washington Post (April 26, 2021).

6   U.S. Census Bureau, "Demographic Turning Points for the United States: Population Projections for 2020 to 2060" (Feb. 2020) (https://www.census.gov/library/publications/2020/demo/p25-1144.html).

7   Congressional Budget Office, The Demographic Outlook: 2023 to 2053 (January 2023) (https://www.cbo.gov/publication/58912).

the U.S. economy at the time also was slowly working itself out of the Great Recession of 2008-2009, and the unemployment rate in 2012 was still nearly 8% - so there weren't labor shortages, and U.S. employers were not screaming for more foreign workers.

But by 2013, the U.S. began to see a surge of unaccompanied minor children coming to the border from the Northern Triangle of Central America (Guatemala, Honduras, and El Salvador), with most claiming asylum – asserting persecution by violent criminal gangs. Under U.S. law, unaccompanied minor children generally cannot be returned using the "expedited removal" mechanism – nor can they be subject to extended detention. They must instead be referred to the Department of Health and Human Service's Office of Refugee Resettlement (ORR), which then places them with U.S.-based sponsors, pending the resolution of their asylum claims in U.S. immigration court.

Next was a wave of adults from the Northern Triangle traveling with children – as "family units." After several court decisions preventing the Obama and Trump Administrations from detaining families pending resolution of their asylum claims, this wave turned into a flood – culminating in Fiscal Year 2019, when CBP apprehensions at the U.S.-Mexico spiked to 977,509, with 527,112 of them being migrants part of family units and over 80,000 unaccompanied migrant children.

What was going on? Was there a sudden spike in violence in the Northern Triangle? No. For one, by 2019, the U.S. economy had fully recovered from the Great Recession, with an unemployment rate of 3.6% - close to today's 54-year low of 3.4%. Labor shortages were back, and there was an ample supply of people wanting

to come to the U.S. and work.

But a bigger factor was the U.S. asylum system – and, in particular, the different treatment of single adults, family units, and unaccompanied minors. For the most part, single adults illegally crossing the border and claiming asylum were detained, and were more likely to be given negative credible fear determinations and subject to expedited removal. But pursuant to court decisions, adults traveling with children were not subject to extended detention. Instead, they were promptly released, issued Notices to Appear (NTAs) at an immigration court to adjudicate their asylum claims sometime in the future to be determined. The adult members of the family units were also given work authorization after some time passed.

This incentivized adults to bring children with them to the border – because bringing a child and being part of a family unit was effectively a "Get Out Of Jail Free" card from immigration detention, and a passport into the United States. Once this became known by smuggling organizations, there was a flood of family units to the border – and an avalanche of new asylum cases hitting the immigration courts.

Currently, there are over 1.6 million asylum cases pending in

both the immigration courts and USCIS. Because of the backlogs, it now takes an average of 4.3 years to resolve an asylum claim in immigration court. Indeed, over 600,000 people who have been issued NTAs by CBP since March 2021 have still not been given a court date to appear.

For asylum seekers who are not detained, this means that after they are released by CBP and given an NTA, they can live legally in the U.S. for the many years it will take for their asylum claim to be resolved, and obtain work authorization. This has become the main pathway for irregular migrants to get into the U.S.

Of course, some migrants have genuine asylum claims and need protection, because they in fact have a well-founded fear of persecution on account of race, religion, nationality, membership in a social group, or political opinion. But most do not. Most are coming to escape poverty, make money for their families, and live a better life – all good reasons to migrate, but not grounds for asylum protection under U.S. law. Indeed, the vast majority of asylum claims made by migrants coming across the U.S.-Mexico border have not been successful. Of all asylum claims actually litigated in immigration courts by Mexican nationals over the last 23 years

(from Fiscal Year 2000 to Fiscal Year 2023), only 16.5% have resulted in a grant of asylum or other relief. Nationals from the Northern Triangle countries have done a little better over that time period (Guatemala – 20.7%, Honduras – 19.7%, El Salvador – 22.3%), and nationals from other countries vary (Haiti – 18%, Nicaragua – 34.3%, Cuba – 40.5%, Venezuela – 56.4%, Ecuador – 24.7%, Colombia – 35.8%, and Brazil – 19.4%).

Suffice it to say, the migrants coming to the border are a "mixed flow" of both genuine asylum seekers and economic migrants. The problem is that the system for adjudicating asylum claims – sifting out the genuine claims from those that are not – has effectively collapsed under the weight of the backlog. There is simply no downside to a migrant claiming asylum, even if the claim is bogus – because chances are you'll be released from detention sooner or later (sooner if you're traveling with a child), you'll get work authorization, and it will take many years before your claim is resolved. In the meantime, you can live and work legally here in the U.S., and even if you lose your asylum claim, it's a good bet that – four years on – U.S. Immigration and Customs Enforcement (ICE) will never be able to find or remove you. So why not travel to the border and try your luck?

3. WE NOW HAVE A BORDER SECURITY CRISIS

The combination of the asylum system's collapse – together with the immigration system's failure to provide sufficient lawful pathways for immigrants and foreign workers to come legally to the United States – has led directly to the mass migration we are seeing today at the U.S.-Mexico border and now, potentially, in the Caribbean. The Obama, Trump, and Biden Administrations have all tried to deal with it in their own ways – some more brutal than others. So far, all have failed, with CBP migrant encounters on the U.S.-Mexico border reaching their highest point ever – nearly 2.4 million – in Fiscal Year 2022. And now the flow is far more diverse, with migrants coming not only from Mexico and the Northern Triangle, but now also with huge numbers coming from Venezuela, Cuba, Haiti, Nicaragua, Peru, Ecuador, Brazil, and Colombia, as well as rising numbers from countries outside the Western Hemisphere. Clearly, the word has gone out that it's open season for irregular getting into the U.S. across the Southwest Border.

A mass migration is not a border security crisis, however. Most migrants illegally entering the U.S. are voluntarily turning themselves into CBP, so as to claim asylum. CBP is then releasing them and giving them lawful permission to stay. Of course, this is happening in huge numbers. According to CBP,[8] of the 2.2 million encountered by the Border Patrol in Fiscal Year 2022, a little less than half were expelled pursuant to the pandemic-era "Title 42" policy set to end in May 2023, while over 1.1 million were processed pursuant to the U.S. immigration code ("Title 8"). Of those, nearly 700,000 were immediately released into the country – either with an NTA or under a grant of humanitarian parole, and after being fingerprinted and vetted against watchlists and databases.

So where is the "border security" crisis? It's in the rising number of people who are not turning themselves in, but are instead sneaking by CBP and into the country. These numbers are rising because, with Border Patrol Agents spending more and more time off the line in stations processing the thousands of migrants and asylum seekers turning themselves in every day, this is leaving many more unpatrolled gaps in the border.

How many people are getting through? This is a subject of debate. The last official DHS report estimating such "got-aways" said there were 136,808 in Fiscal Year 2020.[9] Unofficial estimates leaked by Border Patrol sources indicate that the numbers for Fiscal Years 2021 and

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8   These numbers are drawn from CBP's Custody and Transfer Statistics for Fiscal Years 2021-2023. (See https://www.cbp.gov/newsroom/stats/custody-and-transfer-statistics).

9   U.S. Department of Homeland Security, Border Security Metrics Report: 2001 (April 27, 2022) (https://www.dhs.gov/sites/default/files/2022-06/2022_0427_plcy_border_security_metrics_report_FY2021_%282020_data%29.pdf).

2022 are as high as 600,000 for each of those years.[10] If true, that's 1.2 million people who have snuck into the country without federal authorities knowing who they are or where they went. Even if the real number is half that, it still indicates that the U.S.-Mexico border is far from secure.

4. A HUMANITARIAN CRISIS

In addition to creating a border security crisis, the current situation is also creating a disturbing humanitarian crisis.

First – the vast flow of irregular migrants leaves vulnerable migrants, including children, at the mercy of the criminal human smuggling and trafficking organizations they hire to get them to the U.S., and who often subject them to violence and abuse.

Second – the journey to and across the U.S. border is extremely treacherous. Many from South America, including thousands of Venezuelans, Ecuadorians, and others, plus children, must travel – on foot – through the Darien Gap – a mountainous, snake-infested jungle on the border between Colombia and Panama where many die. Others must travel though dangerous territories in Central America and Mexico, often under the control of violent drug trafficking organizations. Several border cities – including Tijuana and Juarez – are among the most dangerous cities in the world, with high homicide rates,[11] and according to Mexico's Human Rights Commission, tens of thousands of migrants are kidnapped for ransom in Mexico every year, and rapes of migrant women are extremely common.[12] Then, migrants must

traverse the treacherous Rio Grande into Texas, the Sonoran Desert into Arizona, climb dangerously high fences and drop into California, or other places to get into the U.S. And, more recently, we are seeing an increase in dangerous maritime crossings of Haitians and Cubans seeking to get to Puerto Rico or Florida. Far too many people die – with migrant deaths spiking to over 800 in Fiscal Year 2022.[13]

Third, for far too many irregular migrants, the abuse continues here in the United States. The New York Times has recently shown that thousands of young migrant children – many who came here unaccompanied and were placed with haphazardly vetted sponsors by ORR, which then inexplicably lost track of them – have been forced into child labor here in the U.S., doing dangerous jobs for U.S.-based employers, including working in meat-processing plants or making products for well-known brands, like Fruit of the Loom and Cheetos.[14] Many are being held in slavery – working long hours to pay back the smuggling gangs that brought them here. These shocking revelations lay bare brutal consequences of the collapse of America's immigration system, and the seeming inability of our government to enforce its laws.

HOW TO FIX THIS

It is hard to look at the brutal realities of what is going on, and see it

as anything other than a heartbreaking disaster. Everyone agrees that our current immigration system is failing our country – preventing the U.S. economy from accessing the foreign workers it needs, sparking a massive surge of irregular migrants to the border, compromising our border security, and putting migrants – including children – at great risk.

This is fundamentally unacceptable. The need for long-overdue immigration reform is obvious. Frustratingly, because of deepening political polarization, we can't seem to get it done. Indeed, we can't even reach agreement over the lowest of the low-hanging fruit – giving legal status to undocumented people who were brought here as young children, many of whom are working productively as de facto Americans. Nor can we agree on what to do with the rest of the undocumented population – most of whom have been here for well over a decade, many with American citizen children, living within the law as Americans, in all but name and law.

So, instead of addressing these issues head on, we've apparently decided just to keep muddling through. But there are massive costs to doing nothing, such as:

- We spend billions putting over 20,000 Border Patrol Agents in the field, but we still allow over 600,000 migrants to sneak into the country every year.

10   Shane Croucher, "Fact Check: Were There 600,000 Southern Border 'Got-Aways' in 2022?," Newsweek (Dec. 29, 2022) (newsweek.com/southern-us-border-migrants-gotaways-2022-1770201).

11   World Population Review, Most Violent Cities in the World 2023 (https://worldpopulationreview.com/world-city-rankings/most-violent-cities-in-the-world).

12   David J. Bier, "Every State Is A Border State: Examining Secretary Mayorkas' Border Crisis," Cato Institute (Feb. 28, 2023) (https://www.cato.org/testimony/every-state-border-state-examining-secretary-mayorkas-border-crisis#restrictive-border-policies-create-chaos).

13   Id.

14   Hannah Dreier, "Alone and Exploited, Migrant Children Work Brutal Jobs Across the U.S.," New York Times (Feb. 23, 2023) (https://www.nytimes.com/2023/02/25/us/unaccompanied-migrant-child-workers-exploitation.html).

- Our asylum system has become overwhelmed, and because of the resulting backlogs, it has become the main channel for irregular migration into the country, risking public support for the U.S. meeting our humanitarian obligations and protecting refugees.

- We're leaving migrants – including children – to the mercy of smuggling and human trafficking gangs who are holding thousands of migrant children in slavery, forcing them to work for U.S. employers to pay down their smuggling debts.

This is not a system that anyone can be proud of. To its credit, the Biden Administration is aggressively tackling the child labor scandal, and it trying to make the best of a bad situation – finally taking necessary steps to bring order to the chaos, reduce the irregular migration to the border, and break the power of the smuggling organizations. As Title 42 ends, the Administration seems to be unveiling a "carrot and stick" approach – with one carrot being the offer to some populations (Venezuelans, Cubans, Haitians, and Nicaraguans) the ability to apply for humanitarian parole and work authorization in advance.

This has removed 30,000 people a month from the crush at the border, and provided a lawful pathway into the U.S. This is, of course, being challenged in court as an illegal abuse of the humanitarian parole power, and it raises the question of what to do down the road, given that there is no legal pathway from humanitarian parole status to lawful permanent resident status, absent a successful asylum claim or a family-based status adjustment. Will these migrants be left in legal limbo forever? But that is a question for down the road. In the meantime, the Biden Administration has pragmatically placed a band-aid over part of the problem.

The Administration also has been working closely with Mexico and partners to help manage the flow of migrants – and enforce new rules meant to bring order to the situation. For one, it has proposed a rule that would, with some exceptions, require migrants to apply for asylum in other countries they transit – creating a rebuttable presumption of no credible fear if they don't. Assuming it stands up in court, this could pave the way to deeper cooperation between the U.S., Mexico, and other countries on developing a hemispheric approach to migration management.

Lastly, and perhaps most importantly, it has begun to streamline the asylum system – empowering asylum officers to grant relief in some cases, managing dockets more effectively, and employing more immigration judges in an effort to reduce the massive backlogs.

Ultimately, though, there is no substitute for wholesale reform of our immigration system by Congress – meeting America's need for immigrants by expanding lawful pathways, giving legal status to the millions of undocumented people who have been here living lawfully for a while, fixing and adequately resourcing the asylum system, and more effectively enabling us to secure the border, enforce the reformed immigration and migrant labor laws, end the mass irregular migration to the U.S.-Mexico border, put the smuggling and trafficking organizations out of business, and eliminate the scourge of migrant child labor.

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Mr. Stodder is a frequent writer, speaker, and media commentator on various issues. He lives in Los Angeles and is a member of both the Council on Foreign Relations and the Pacific Council on International Policy. A 2008 Marshall Memorial Fellow, he also serves on the Alumni Leadership Council of the German Marshall Fund of the United States, and as a member of the Truman National Security Project. He received his B.A. from Haverford College, and his J.D. from the University of Southern California Law School. He is a member of the California State Bar, as well as the Bar of the Supreme Court of the United States.

Preventing human trafficking: Joint IBMATA/ RSO Bali Process workshop findings

EUN JUNG YI FROM RSO BALI GROUP OPENING JOINT IBMATA / BALI GROUP WORKSHOP ON HUMAN TRAFFICKING, SINGAPORE, SEPTEMBER 2022

TONY SMITH, CHAIRMAN OF IBMATA, ADDRESSES THE WORKSHOP ON THE VALUE OF CROSS SECTOR COLLABORATION TO DISRUPT INTERNATIONAL TRAFFICKING GANGS.

Members of the International Border Management and Technologies Association (IBMATA) and the Regional Support Office of the Bali Process on People Smuggling, Trafficking in Persons and Related Transnational Crime (RSO) came together at a joint workshop in Singapore on 20 September 2022 to discuss the ongoing threat of human trafficking and people smuggling across International Borders, and how the international border community can help to deter and disrupt these activities.

The workshop was attended by several recognised experts in the field of human trafficking and international border management from both the public and private sector, including academia. Delegates were invited to discuss a series of questions – covering topics ranging from the impact of the Covid-19 pandemic, to best practice around early detection of criminal activities relating to irregular migration, to considerations around use of personal data, and the effectiveness with which states are adopting technology in current border management practice and subsequent information sharing across borders.

There was strong consensus around the need to prioritise information sharing within and across borders, to strengthen impact across the international community. Where advances are being made in data gathering, adoption of technology and intelligence – best practice needs to be shared across countries and systems aligned – to disseminate intelligence effectively across borders and to build capacity in terms of resources and training as far as possible across regions.

Here is a summary that notes participants were divided into five groups with the objective of discussing recent themes and trends in border management relating to transnational crime and reporting back to larger group.

GROUP 1

- Has the COVID crisis and the subsequent closure of international borders, businesses, and loss of income led to an increase in people smuggling, and trafficking in persons?
- Has the re-opening of borders affected people smuggling and trafficking in persons trends?

In general terms the closure of air routes across international borders caused by the COVID-19 pandemic made it more difficult for traffickers and smugglers to exploit legitimate travel routes. Many source and transit countries closed their airports altogether, and those that remained open demanded more information from travellers (notably health declarations and vaccination certificates) which did not suit the traditional modus operandi employed by the traffickers and smugglers. Criminal operations prefer to avoid direct and indirect contact and interaction with government agencies, and only to do so under the guise of deception as to their purpose of travel (often posing as a guardian or relative of the victim, or even travelling independently). That is not to say that the COVID-19 pandemic had a significant impact upon preventing human smuggling and trafficking altogether. The downturn in economic viability in countries already suffering from extreme poverty created an environment where exploitation of the vulnerable became more rather than less likely; and (worryingly) more dangerous routes by land and sea became more attractive for international organised crime gangs.

Of course the re-opening of borders and resumption of international air travel provides smugglers and the traffickers with additional opportunities to play their trade across international borders. If there are any lessons to be learned from COVID-19, the importance of gathering passenger information and sharing information across borders is key, so that border agencies become more adept at identifying signs of trafficking earlier in the journey and arranging upstream interdiction in source and transit countries, wherever possible. This requires more coordination and collaboration within individual countries and across national borders.

GROUP 2

- What can source, transit, and destination countries do to improve early detection of people smuggling and trafficking in persons?
- How can government and private sectors work together to disrupt people smuggling and trafficking in persons?

There is a distinct difference between trafficking and smuggling; and each has its own challenges in detection and prevention. It is important that these are understood by all parties.

Trafficking can (and indeed normally does) involve legitimate travel and legitimate documentation, with potential victims actually wanting to travel due to fake promises made by traffickers. Often, only after the journey and border crossing has taken place does the true nature and risk manifest itself. This raises questions as to how border agencies can intervene at all when no crime has been committed; and the potential victim actually wants to travel.

It was agreed that processing at the borders has limits to address the crime of migrant smuggling and identify migrant smugglers. Combatting the use of social media and mobile applications by smuggling networks was seen as an urgent priority for efforts.

Some delegates felt that strengthening borders and reducing regular migration routes leads to increasing the draw of smuggling, as well as the costs and potential dangers associated with it. Arguably if there were no borders, there would be no human smuggling; and if you build bigger borders, then the smugglers will bring bigger ladders. Although realistically – all countries have a duty to protect their populations from harm.

There was a broad consensus that there needs to be better information-sharing systems between governments on intelligence, victim profiles, perpetrators etc. However, the group also noted that the source countries of many smuggled individuals have limited capacity to manage migration, and corruption also contributes to weak governance over transnational organised crime.

Delegates also felt that air crew and airport staff often spend much longer in the presence of potential victims of trafficking;

and there is a potential role to help and train airline staff to spot individuals who may be at risk. There is more thinking to be explored around how this could work, and what role airline staff could realistically play. Airline staff are not law enforcement officers, but delegates noted that trafficking is a societal problem, and all citizens have a responsibility to report potential crimes regardless of their profession.

In keeping with several previous IBMATA findings, the group agreed that Border Agencies should use new and emerging technology to pre-clear the vast majority of legitimate and low-risk travellers; and develop tools to allow skilled border force officers to focus more time and effort on the suspect and high-risk travellers.

GROUP 3

- To what extent can Border Agencies intercept and act upon digital data held and shared by people smuggling and trafficking in persons networks?
- What are the latest trends and evolving methods (modus operandi) in people smuggling and trafficking in persons detected at your respective border?

If a legal investigation is opened, Law Enforcement Agencies have access to any information / devices carried by the subject of the investigation. This information can be collected and collated to generate reports and possibly create profiles of persons of interest to feed into risk assessment processes and targeting centers. However, it is difficult to investigate every case due to time pressures and limited investigative capacity. These are very dynamic situations as risks evolve very quickly at times; and international data

sharing is very complicated. Prior to an investigation being initiated, it is even more difficult. Future work should focus on intelligence & targeting center development, and integrated border management concepts (e.g. interagency cooperation).

Reliable data on both people smuggling and trafficking persons is limited. It is contained within the broader bucket of "intelligence information". Although this does contain some info on the main smuggling routes used.

GROUP 4

- What are preventive measures underway in your respective borders and how these can be further enhanced with technology?
- Is your current information gathering system giving you the info/data that you need to make lawful / timely decisions for border management? How this should be enhanced?

In some land border locations, physical barriers may exist, particularly close to cities. Technology-based solutions also exist to cover vast border areas between ports of entry. These solutions can be enhanced by surveillance technology to help identify incursions and allocate resources for rapid response. Similar technology options are available for maritime borders.

Preventative measures include press and media communications in neighboring countries, to discourage potential victims from travelling. Training on documentation in source and transit countries can also help to identify problems in countries of origin.

However, many technology systems are not talking to each other. Help is needed to enable systems to communicate with

other systems, as well as the humans in the process.

Current information gathering systems can provide the data and intelligence needed to make lawful/timely decisions for border management – but only if the country concerned has invested in an integrated system. A lot of countries have not been able to do this.

We need to provide simple training tools for border agents. Training courses – especially those that combine regions and departments to ensure that they are taking the same training and are working with the same tools – can help us to identify gaps in their knowledge.

Technology can be a hinderance if we are not training people on how to use it and providing them the right tools to use it. Moreover, to ensure real effectiveness and inpact, there needs to be effective structures for information sharing within and between countries.

GROUP 5

- Is information sharing happening between your counterpart agencies across national and international borders (land/maritime/air borders)?
- How can international forums such as IBMATA and the Bali Process further facilitate international cooperation and private-public partnerships for enhanced border management?

Information sharing is happening at an international level. Border Agencies can get information from Interpol. By cross-sharing intelligence from Interpol and other intelligence partners, law enforcement agencies can exploit weaknesses in the smuggling networks. It is important that border agencies combine international

intelligence with their own intelligence, and push information out to partner countries.

Many countries have bilateral agreements with their neighbours. The more the better – but this is not happening fast enough. There are also limited resources in key areas (e.g., targeting officers) and sometimes they are not well trained. Regional cooperation is vital.

Data quality can be challenging – e.g., Interpol datasets. There is no global standard for international data sharing. This is often due to privacy constraints. Much depends upon whether data is from a trusted source or not. Countries from which most information is received is not usually the source country.

Borders vary in terms of what can be done. In the air mode Passenger name records (PNR) has well established standards so air traffic is easier to control. Maritime is more difficult. Clandestine entry at land borders is a big issue because we might not know a person is there.

We should not ignore Customs. We do often get information about goods' movements, which may provide some clues.

International liaison always helps, either government-to-government or via international government organisations or non-government organisations.

It is important to get the end users engaged. This should involve police and immigration – greater integration is needed between them.

There is a friction in the relationship between private and public sector, with a perception that the private sector is always wishing to sell products rather than solve problems. Private sector representatives need to get involved more with frontline users to understand requirements better. One idea might be to have trusted vendors who can take part in policy discussions on a non-commercial basis.

CONCLUSION

Overall there was consensus that law enforcement agencies should strengthen cross-border and multisectoral cooperation to address people smuggling and trafficking in persons while fostering international cooperation. It will be important to continue dialogue and joint activities between source, transit, and destination countries. This means regular sharing of data and intelligence and gathering feedback from trafficking victims, smuggled migrants, assistance providers, and law enforcement professionals.

There are several companies developing tools to enhance data gathering and intelligence. It is important that Border Agencies and others are made aware of these capabilities; and do all they can to make best use of them in order to disseminate intelligence across borders. Only by working together will the international community be able to disrupt and deter criminal gangs that are exploiting vulnerable individuals for their own personal gain.

RSO and IBMATA are committed to support stakeholders in strengthening border management to fight against transnational crime and look forward to future opportunities for engagement.

RSO AND IBMATA ARE COMMITTED TO SUPPORT STAKEHOLDERS IN STRENGTHENING BORDER MANAGEMENT TO FIGHT AGAINST TRANSNATIONAL CRIME
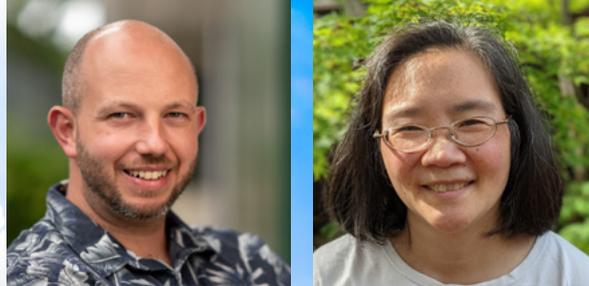
By Declan Trezise with Tina Lieu

AI for Streamlining Border Security and Fighting International Drug Rings

A container ship from Latin America docks in Antwerp, Belgium, with a cargo of bananas. Its paperwork lists the exporter, their company, the company address, and the cargo manifest, along with the ship's origin and destination. The trucker accepting the cargo must pass through truck registration. Every border checkpoint is an opportunity to stop the movement of bad actors or illegal cargo. Is the exporter on a watchlist? Is this a shell company? Who is the truck driver?

Belgian authorities estimate that between the Antwerp container terminal — the putative gateway for illegal drug trafficking from Latin America into Europe[1] — and the container terminal in Rotterdam, the Netherlands, only 10 percent of illegal cargoes are intercepted. It's a staggering thought, given that authorities in Antwerp seized 89.5 tonnes of illegal drugs in 2021 and 109.9 tonnes in 2022.[2] To put that in perspective, a kilogram of cocaine has a street value of USD 35,000. Thus, one tonne (1,000 kg) of cocaine

is worth USD 35 million, becoming 5 million doses of 0.2 grams.[3]

To combat the flow of illicit cargo, border agencies and law enforcement are adopting AI and natural language processing (NLP) technologies to automate name screening against watchlists and fully leverage captured intelligence.

AI TO SPEED BORDER SCREENINGS

Major border security agencies, including U.S. Customs and Border Protection and the U.K. Home Office Borders, Immigration and Citizenship System, already embed AI-powered name matching into the systems that screen passengers against watchlists.

More accurate screening at every checkpoint makes it harder for international criminals to pass undetected. But not all name matching technologies are equal. Modern technologies accelerate screening in three ways:

1. With greater accuracy than traditional technologies that rely on rules, modern name

matching decreases false positives and false negatives. How? It simultaneously considers more than a dozen ways that names vary, such as nicknames, transliteration variations, initials, truncation, misfielded/out-of-order names, and the same names written in different languages.

2. Nuanced match scoring enables greater automation. Passport control can automatically approve non-matches — match scores below a certain threshold (say 85%) — and pick up those above a certain threshold (say 90%) for secondary screening. Human review can be limited to borderline cases — for example, those with an 86%-89% match to a watchlist entry.

3. Modern name matching also tackles specific issues of matching addresses and organizational names, which often differ by a synonym, such as "PennyLuck Drugs" versus "PennyLuck Pharmaceuticals."

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3   Casert, Raf "Despite record cocaine seizures, drug cartels roil Europe," 10 January 2023, AP News. apnews.com/article/health-drug-crimes-belgium-europe-european-union-075e1cec66b439284ed58fc76747fbb1

BREAKING UP DRUG TRAFFICKING NETWORKS

Catching illegal drugs is a significant challenge. More than 138 million tonnes of container cargo passed through Antwerp in 2021 alone.[4] Cracking encrypted messaging apps has been a key turning point for learning who the players are, where they will be, and what they are shipping.

In 2020, the Encrochat app was infiltrated by French and Dutch police agencies, giving them access to photos and millions of messages sent between criminals.[5] Most recently, Dutch police cracked the Exclu encrypted messaging app (which has 3,000 users), and read communications between organized criminals for five months. This resulted in widespread police raids in the Netherlands, Germany, and Belgium in February 2023.[6]

One of the biggest breakthroughs was when Belgian police services deciphered the Sky ECC encryption — a secure messaging app widely used by drug traffickers around Antwerp, where some 164,000 users were exchanging 1.5 million messages daily.[7] Cracking Sky ECC gave authorities access to 1 billion messages.[8] With the February 2021 breakthrough, Belgian police were capturing tonnes of cocaine at a time, instead of hundreds of kilos.[9]

The main obstacle to fully leveraging 1 billion messages was time. How quickly could the authorities capitalize on the who, what, when, and where before setups and locations were changed?

According to Belgian federal prosecutor Frédéric Van Leeuw: "With a team of 40 police officers to read and contextualise all those messages, it would take 685 years to go through everything. Each message takes about five to six minutes. To read everything in one day, you need a team of 11 million Belgians."[10]

Or, you turn to artificial intelligence powered by NLP, which can process megabytes of text in a minute. These are the technologies that are being deployed in government intelligence agencies today.

QUANTUM LEAP OVER KEYWORD SEARCH

AI built on deep learning models automatically identifies the names of people, places, and organizations in free form text and determines which ones match its internal knowledge base of known criminals and associates. This process gets a boost from entity linking, which is NLP that looks at document context to determine if "Jean Dupont" is a known criminal or a legitimate businessperson.

Until recently, finding the important text meant performing a simple Boolean keyword search. But because it just looks for words, that method returns too many irrelevant results and misses vital information. Many words have multiple meanings based on context. (Is "interest" about the price of a loan or a stake in an investment?) There are also many ways to express the same idea with different words. (A "cocktail" might be "whisky on the rocks," "margarita," or "booze.")

NLP innovations replace the inaccuracies of keyword search with event extraction and search by meaning, called semantic search. Event extraction finds things like "cargo movement" and delivers the key event components: dates, shipper, recipient, destination, origin, and cargo. Semantic search fuzzily finds sentences that have similar meanings to "shipped the merchandise to Antwerp," even if it is written as "sent your cargo via Antwerp" or "le produit est envoyé par Bruges." (Translation: The product was sent via Bruges.)

The tireless computer speed of NLP, and AI's ability to handle messy human-generated data, can strengthen borders and expedite cross-border investigations.

Declan Trezise is Director of Global Solutions Engineering at Babel Street, whose AI-powered Rosette name matching technology is deployed by U.S. Customs and Border Protection and in the UK Home Office Borders, Immigration and Citizenship System. Tina Lieu is a freelance writer in the NLP space.

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Lyons, Helen "'Reading all Sky ECC messages would take us 685 years,' police say"

Agence-France Presse (AFP) "Record cocaine seizures in Antwerp as Belgium battles drug gangs"

10   Ibid Agence-France Presse (AFP) "Record cocaine seizures in Antwerp as Belgium battles drug gangs,"

By Steve Grant,
Director Business Development,
Entrust

ICAO Digital Travel Credentials will change the World of Travel

The unique nature of the ICAO Digital Travel Credential (DTC) presents an exceptional opportunity, rarely seen in the history of passport issuance and border control: the chance to build a next generation system for passport issuance and inspection that sets the highest standards for the traveller experience. At Entrust, we fully support the vision set out by the International Civil Aviation Organization (ICAO) in their policy paper *Guiding Core Principles for the Development of the Digital Travel Credential (DTC)* version 4.6 published in August 2021. ICAO has set out a careful and deliberate progression of technological advances from the current eMRTD standard for ePassports to a future state that will see only virtual eMRTDs without an ePassport booklet (physical component) being produced. This journey will take many years.

There have been a number of policy and technical papers released – including several which have been officially approved by various ISO and ICAO bodies – and despite the gaps in technical specifications, we've seen many seamless travel pilots already conducted. However, much of the policy work at the ICAO level to enable the DTC Type 2 (Passport-Issuer created DTC) remains to be done. Now is the time for governments and the industry to make contributions to this work and to consider how the policy options being considered would impact on future technology choices.

DTC STANDARDS

The official documents from the standards bodies originate with the *ISO/IEC JTC1/SC17 Cards and security devices for personal identification* and its subgroup the SC17 WG3 for Traveller Identification. Specifications developed by WG3 under direction and guidance from the ICAO New Technologies Working Group (NTWG) are returned to the NTWG for review and subsequently forwarded to the ICAO/TAG for approval before promulgation.

Three DTC Types have been developed for measured implementation

DTC Type 1 eMRTD bound DTC	DTC Type 2 eMRTD-PC bound DTC	DTC Type 3 PC bound DTC
Derived from eMRTD	**Issued alongside eMRTD**	**No underlying passport book**
• VC = copy of eMRTD chip	• VC = copy of chip + additional data + cryptographic link to PC	• VC = same data structure + cryptographic link to PC
• PC = physical eMRTD	• PC = created on physical device	• PC = created on physical device
• MUST be accompanied by passport book	• SHOULD be accompanied by physical passport during travel	• May have unique characteristics (e.g., passport number, validity, digital signature, etc.)

VC = Virtual Component   PC = Physical Component

The technical specifications currently cover DTC Type 1, but only partially. There remains significant work on the communications protocols between the DTC and inspection systems, and nearly all of the Type 2 and 3 specifications are yet to be developed. It is very difficult to estimate dates for completion of the tasks, and even more difficult to estimate approval dates by the ICAO TAG.

DTC PILOTS

Pearson Airport, Toronto
Canada Border services worked with Entrust and Face4 on smartphone-based enrolment including DTC derivation for a touchless arrivals process for returning Canadian citizens. The goal was to test passing identity information and traveller declaration to the CBSA back-end for processing, essentially replicating kiosk-based traveller processing, but via a self-service touchless process.

UK / EU
Eurostar is working with iProov and Entrust on smartphone-based enrolment including DTC derivation for a touchless train journey check-in and border processing for passengers departing the UK via St. Pancras International. Derived DTC can be re-used for subsequent journeys. Hundreds of transactions demonstrated improved traveller throughput without compromising security. Eurostar decided to re-deploy the service as an operational system by Spring 2023 at St. Pancras before rolling out to continental stations.

Finland / Croatia
Finland and Croatia are trialling DTC-based touchless immigration processing with funding and support from the European Commission.
The project scope is to test the DTC at the external border to the EU for both arriving and departing travellers over a one-year period. The smartphone-based custom app requires travellers to submit their DTC prior to travel.

Netherlands / Canada
This pilot is a collaboration between the Ministry of the Interior, the Royal Netherlands Marechaussee (KMar), the National Service for Identity Data (RvIG), Schiphol Airport and KLM Royal Dutch Airlines. Funding is provided by the European Commission. Canada's engagement is limited to facilitating temporary procedural changes to waive the presentation of a physical passport prior to boarding. Project scope is for Netherlands and Canadian citizens departing CAN to NLD on one single route.

DTC USE CASES

The NTWG identifies the following potential DTC use cases:

1. DTC-VC as an Enabler of Seamless Travel
Using the packet of verifiable traveller data – including a facial image – as the enabler of touchless travel experiences.

2. DTC to Improve the Advance Travel Authorization Process
Authentication of data submitted to Electronic Travel Authorization and similar schemes, and elimination data errors.

3. DTC to Streamline Border Management
Pushing the conceptual border out before travel starts by enabling the passenger to send data in advance, allowing authorities to make early watchlist checks.

4. DTC as an Emergency Travel Document (ETD)
Type 3 DTCs could be issued by authorities to citizens whose passport had been lost or stolen during travel.

This list is not exhaustive; however, it is sufficiently varied to demonstrate that potential use cases are many. Note that most use cases benefit entities other than the passport issuer, apart from the DTC as an emergency travel document. For this use case, there could be significant savings for both the issuer and the applicant in terms of the time and financial resources required to provision an ETD quickly, even in locations far from the nearest embassy or consulate.

Another possible use case not listed above is for the passport renewal process by allowing a remote self-service renewal from an applicant's smartphone. It could easily be demonstrated that an applicant is in possession of their soon-to-expire ePassport, the cryptographic security in the ePassport chip is intact and functioning, and that a selfie of the applicant matches the photo stored on the chip. Also, the posed selfie could be scored against ISO 19794-5 for suitability as a passport photo.

WHAT CAN DOCUMENT ISSUERS DO NOW?

The list of pilot projects above shows a bias towards pilots in the seamless travel space. These pilots are enabled by the initial technical specifications for DTC Type 1 being available and approved. The specs are not complete, however, as additional work is required around the communications protocols between the DTC and whatever inspection device or system is interrogating the DTC. (As an aside, ICAO is extremely conscious of the need to retain backwards compatibility, therefore NFC communications will be retained, likely to be supplemented by Bluetooth Low Energy (BLE).)

Document issuers could follow the path being blazed by the Netherlands Ministry of the Interior mentioned above, recognizing that it will be in the seamless travel domain and not related to issuance of eMRTDs and/or DTCs. Historically, document issuers bake the cake (issue the MRTD), but they don't have much to do with how the cake is eaten once it leaves the bakery. A pilot of this sort would require forging closer relationships with immigration authorities and airlines, both at home and abroad, which should lead to greater learnings than from exposure to the different perspectives of consumers of the passport "cakes".

A pilot with a scope contained within the normal mandate of a document issuer would perhaps be easier to implement, but still has plenty of opportunities to discover technical and policy areas requiring attention. Some allowances may be needed for technical details related to DTC Types 2 and 3 which are not yet covered by DTC technical specifications. The two obvious use cases fully (or nearly) within the control of a document issuer are:

1. Using a DTC to enable the passport renewal process.
2. Using a DTC as an Emergency Travel Document.

The rate of adoption of innovations in the passport world has some very understandable friction. Most passports are valid for ten years, ICAO's policy to be backwards compatible with previous technology whenever possible, and the consensus-based standards development process used by ICAO and ISO all contribute to what may appear to casual observers to be a glacial pace. But for the people directly involved, whether from industry or government, there is a growing excitement for the changes the DTC will bring to the world of travel.

Over the past 20 plus years, Steve Grant has worked as a subject matter expert with multiple international organizations and governments applying his extensive experience in identity document systems, border security, consular management software, civil registries, voter registration and biometrics.

Home Office

Home Office Border Vision Advisory Group update

FURTHER TO OUR JOINT WORKSHOP WITH IBMATA IN LONDON LAST YEAR, THE HOME OFFICE, FUTURE BORDER AND IMMIGRATION SYSTEM (FBIS) - BORDER VISION TEAM CONTINUES TO TRANSFORM THE UK BORDER, MAKING VISIBLE CHANGES TO SECURITY, FLOW AND PASSENGER EXPERIENCE BY ENABLING INCREASED AUTOMATED ENTRY TO THE UK FOR ELIGIBLE PASSENGERS.

The Home Office has successfully concluded a live Proof of Concept (PoC) trial to see if the age limit for current eligible nationalities that can use current e-Gates may be lowered from 12 to 10 years. The PoC was made legally viable by the recent passing into law of the Immigration (Leave to Enter and Remain) (Amendment) Order 2023, following its successful passage through both Houses of Parliament in January.

The live PoC enabled eligible passengers as young as 10, for the first time, to cross the UK border via an automated e-Gate. The live trial began on Monday 13 February and ran until 26 February at three ports (Heathrow terminal 5, Stansted and Gatwick North).

This is the first stage of a wider package of works to expand the eligible cohorts that will be encouraged to use e-Gates, and similar technology, to deliver enhanced security and flow through the Border. We plan to have a seamless, intuitive and fully digital, end-to end journey for customers interacting with the immigration system by 2025.

By Jean-François Lennon,
Vice President of Strategic Sales,
Vision-Box

Vision-Box – a secure and contactless border experience

More than ever before, the need for a secure and contactless border experience is of greater importance. In an increasingly volatile global travel environment, combined with new security and public health threats, border agencies face more complex challenges against which they need to proactively act. To be more resilient and effective, border agencies must upgrade their processes, officer's skills and technology whilst ensuring that border experiences are compliant with new entry/exit regulations, become more digitalised and are delivered as seamless and contactless as possible.

Many Border Control agencies have started to collect data early from multiple points rather than only traditional sources such as visa applications and border crossing points. The increasing interoperable use of this data is meant to support risk-based national security control by pre-screening expected movements as early as possible. Furthermore, individuals' identities have traditionally been verified by biographic information such as physical passports - in this case, the data is only as accurate as the document being presented leaving the risk of identity fraud. This led, in phases, to the introduction of more reliable methods of using biometric capabilities such as facial and fingerprint verification, especially when authenticating electronic travel documents. These technologies have already shown their benefits, by becoming the most secure, reliable, and efficient means to implement and truly empower all stakeholders – airports, airline, maritime, land and rail traffic operators, border control agencies, and most importantly, the travellers.

## DIGITAL IDENTITY MANAGEMENT PLATFORMS AND BORDER CONTROL

Digital Identity Management Platforms provide terminal operators at air, land and sea with a scalable and safe alternative to direct physical contact, by leveraging biometric screening through a sequence of security, border control and departures/arrivals points.

The use of Digital Identity Management Platforms enables multi-stakeholder collaboration based on real-time intelligence. This approach is a fundamental pillar to shift from traditional border control to risk-based profiling while expediting flows of bona fide passengers through automated border control. At the initial point of biographic and biometric ingest, a secure digital travel ID token is created in compliance with ICAO DTC Type 1 standard. This token becomes the 'Permit to cross', when travellers are identified in real-time at subsequent check-in, boarding and exit points. Other checkpoints at the terminal will then automatically identify and digitally authenticate the traveller's credentials in a matter of seconds, eliminating the need to exchange paper documents with an agent or officer.

Vision-Box's partnerships with several role-model governmental organisations have allowed for the introduction and implementation of last-generation smart borders solutions, including some EU Entry/Exit System (EES) capabilities within the Schengen area. These aim to modernize and expand the existing border control infrastructure and increase operational efficiency at border crossing points, whilst guaranteeing full compliance with the EU Commission regulations. These initiatives are set to replace the existing traditional border controls of Third-Country Nationals with orchestrated digital passenger
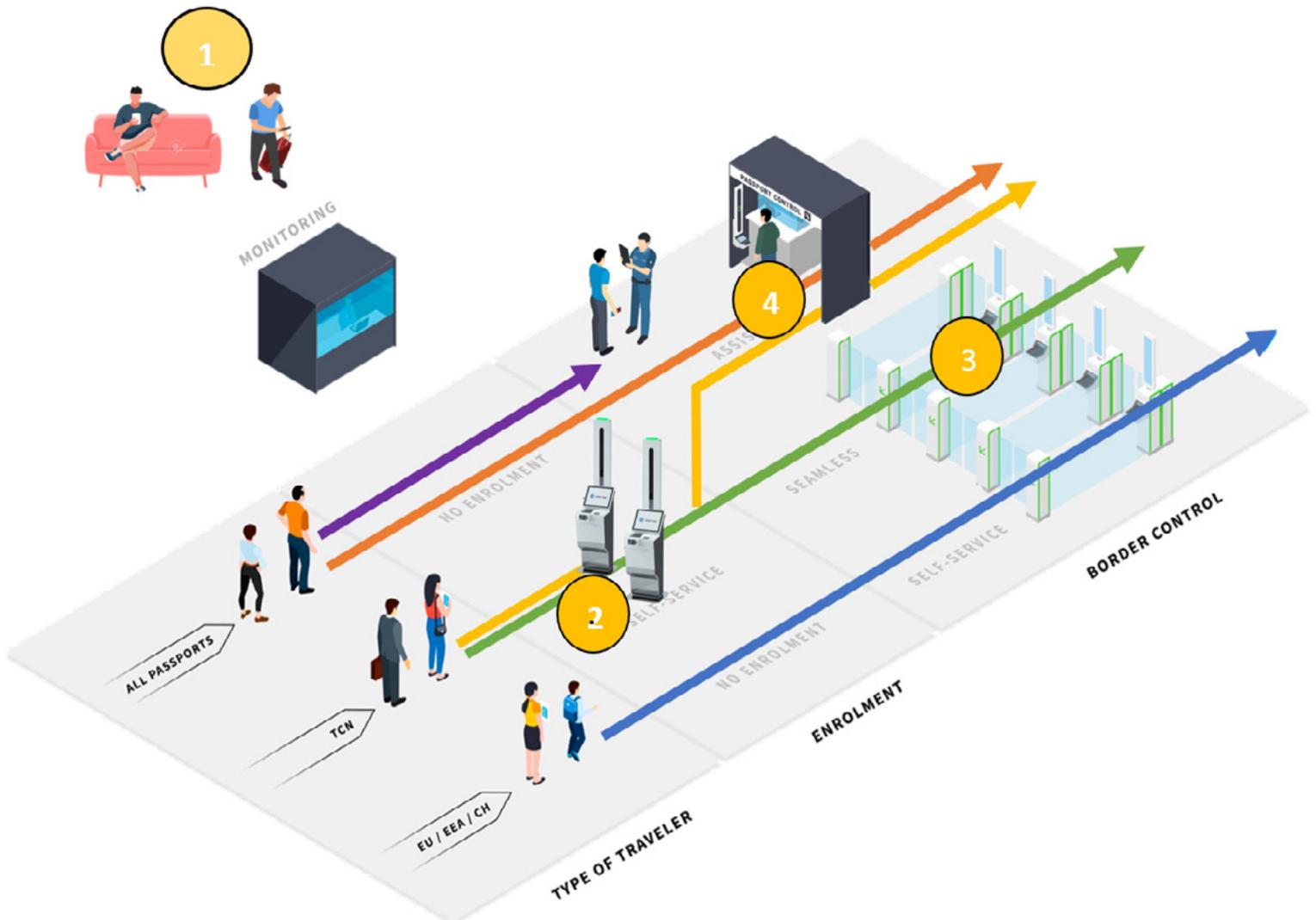
processing and automated biometric data collection as well as support officers in their duty whilst enhancing operational efficiency.

Vision-Box has provided several member states with the latest solutions for pre-enrolment, automated and manual border crossing supported by a Privacy-by-Design certified Digital Identity Management Platform. As a collaborative platform of real-time intelligence, it is designed to accommodate large volumes of transactions and qualitative compulsory information on travellers' identity, flows of movements, connected devices, and third-party legacy systems. This offers an end-to-end integrated solution that is human-centred, including automatic and assisted contactless capture of regulatory information, process and control of all required data whilst guaranteeing GDPR compliance at every step of the journey.

Vision-Box as a company and its software platform are Privacy-by-Design certified since 2018. Vision-Box's Digital Identity Management Platform multi-tenant architecture, together with its administrative and operational consoles, proactively embeds privacy and security into its design ensuring Data Protection and Data Security throughout the end-to-end journey. It is the only Identity Management Platform certified by Privacy by Design and compliant with GDPR, orchestrating all the functionalities from traveller touchpoints and any other external systems, bringing earlier information and innovation to the end-to-end process.

As shown in the diagram, Vision-Box's border control solutions start with the self-service pre-registration which passengers can do from the comfort of their homes when legislation allows it. The MobileID SDK solution allows for travel document reading and validation, quality face capture, liveness detection and trusted biometric verification, all integrated with the Digital Identity Management Platform for secure enrolment, using ICAO DTC compliant standards.

Depending on their nationality, upon arrival at the terminal, travellers can use the self-service Seamless Border Kiosk to complete their enrolment, followed by directly going to the automated border control process for a contactless crossing through the Seamless ABC eGate, or reach the manual booth for an assisted process, still using their face as a token to retrieve their Seamless kiosk enrolled profile without having to once again produce their passport. This is what we call the orchestration of the border crossing flow, leveraging a person-centric approach based on their risk profile, fuelled by trustable biometric identification.

THE FUTURE OF BORDER CONTROL

The future border will be an invisible one for most citizens, administrated by government and border agencies that base their decisions around pre-travel vetting and real-time data where intuitive passive collaboration between humans and machines will enable real-time decisions. This evolution in border control processes is already evident today as we have seen various forward-thinking agencies investing in new technologies to transform their operations and processes, exploring the so called "free-flow" concept.

Consumers in all sectors of the digital economy are growing, used to the convenience and autonomy of self-service options. The 2022 IATA Global Passenger Survey revealed that 75% of passengers are willing to share their biometric data to improve airport processes and 88% would share immigration information before departure in return for

expedited processing. This proves the fact that the travel industry is mature for such alternatives with biometric technology being the key enabler of this transition. The pandemic itself was an accelerator for the innovation, development and implementation of biometric technologies and systems at border controls to create a more secure, frictionless experience for passengers whilst enabling airports, airlines, and border control agencies to handle a higher volume of transactions in a more efficient manner.

For Vision-Box, the next generation of travel journeys will be automated home to home. A single biometric identity token will unlock every stage of the journey, using a combination decentralised digital identity and on-premises biometric processing, enabling those managing processes and providing services for decisions that can be made with a single qualified click. Travellers arriving at security and immigration checkpoints will have been previously remotely vetted at check-in off or on-site through their Digital ID wallet. All they will need to do is show their face to a smart IoT face camera and proceed. Behind the scenes, travel documents will be digitally authenticated and stamped, throughout a trusted cross-border interoperable framework, enabling free-flow identification of anticipated low-risk border crossing candidates. Similarly, airlines' departure control systems, flight lists, advance passenger information (API) and passenger name record (PNR) attributes will be fully integrated to ensure only eligible travellers board the aircraft.

Jean-François Lennon is Vice President of Strategic Sales at Vision-Box, a leading provider of Seamless Travel and Digital Identity Solutions. Jeff is a Senior executive with over 20 years of experience in the security and digital technology industries. Jeff's career broadened his market insights and expanded his international experience by opening and growing markets throughout the world.
Since joining Vision-Box in 2012, Jeff embarked on wide-ranging projects spearheading the exponential growth of the company. He currently leads strategic sales and partnerships on a global basis and is a key contributor to the scaling plans of the company. Jeff has a growing reputation as an industry thought leader and digital ID evangelist, combining his proficiency in transversal entrepreneurship and strategic thinking with a profound understanding of transformational trends.

Yuri Feliciano
Innovation Advisor,
Government of Aruba

Aruba Happy One Pass: The road to a seamless travel journey

Aruba may be a small island in the Caribbean but it is increasingly known for its outsize role in travel innovation. This started with the Happy Flow and then accelerated during the pandemic with being the first to include electronically verified Covid health requirements connected to eGates. The Ministry of Tourism & Public Health, in collaboration with SITA, Aruba Tourism Authority, Immigration of Aruba, and Aruba's International Airport (Reina Beatrix), has now launched the Aruba Happy One Pass project. The goal is to provide passengers with a seamless travel experience to Aruba by using ground-breaking data and digital verification software that will speed up check-in and border crossing while protecting their privacy. This first-of-its-kind project is possible because of Aruba's invaluable partnership with SITA, the world's leading provider of global information and telecommunications technology to airlines and airports.

The Aruba Happy One Pass (Aruba HOP) will be divided into several phases. During the first phase, Aruba will work closely with airlines to optimize the check-in request process initiated by passengers. Passengers will download the Aruba HOP app and create a digital representation of their passport information. They will then pass their information through SITA technology to be turned into a Digital Travel Credential (DTC). Upon arrival, the passenger will use the existing eGates in the Aruba terminal to scan their passport for the Government of Aruba to check their information against the government approved embarkation debarkation (ED) card database. This will ensure a comfortable and quick travel experience for passengers visiting Aruba.

Hotels on Aruba have also expressed interest in participating in the seamless travel project. In the fall of 2022, there was a series of information sessions and workshops for the hotels on Aruba, explaining how the technology works and how they can use it to provide a better check-in experience for their guests.

After an enthusiastic response, the project will now expand to include a series of pilots for seamless hotel check in. The goal is to make every step of a visitor's journey from the moment they check in online at home to entering their hotel room swift, secure, and simple, so that they can start to enjoy Aruba before they even arrive. Many hotels are now interested in adopting this technology.

This digital transformation, using the latest in decentralized identity technology, is generating enormous interest among airlines and airports around the world, and it will change the way people travel for the better. We can take pride in Aruba driving this innovation, in being a technology leader, and most of all, in delivering the best possible travel and vacation experience to our guests.

As an appointee of the Prime Minister of Aruba, Yuri Feliciano led the Aruba eGovernment pilot project. He currently supports the government of Aruba as the innovation advisor to the Minister of Tourism and Public Health with the project lead for the Aruba Happy One Pass and working on the Aruba Health App and the ED Card the electronic travel authorization system. Yuri earned his degree in Computer Science at Embry Riddle Aeronautical University and has worked in software development for over two decades. Prior to his work in Aruba, he provided his expertise in software implementation to companies across Eastern Europe entering the European Union.

By Frank Heijman,
Head of Trade Relations,
Customs Administration
of the Netherlands

Trade Facilitation in The Netherlands by Dutch Customs

Dutch customs is responsible for ensuring a fair balance between custom controls and the facilitation of legitimate trade. This explicitly gives Customs the mandate of carrying out tax, safety or security checks in such a way that they do not unnecessarily impede the logistical handling of cross-border goods movements. There must be a 'fair balance' between control of the logistical handling of international trade: a control in the logistical flow is justified if there is a proven risk that gives the rise to it, while at the same time disrupting the logistical process as little as possible.

THE FRAMEWORK

The Trade Facilitation Agreement (TFA), which was signed in 2013 and entered into force in 2017, contains provisions aimed at interaction and transparency in communication between Customs and businesses to facilitate international trade as much as possible. The TFA is also intended to improve cooperation between Customs organisations and other governmental departments involved in monitoring international trade. It also contains recommendations on subjects such as consultation with the private sector, the content and timeliness of information provided to it, and

objection and appeal procedures. The TFA has more or less acquired the status of instructions that are binding for the member countries and their Customs organisations, which lay down guiding frameworks for implementing Customs' mission in practice.

The Netherlands has fulfilled its obligation under article 23 of the TFA by setting up the Customs-Business Consultation Platform (ODB) which has been communicated to the WTO as the National Trade Facilitation Committee. Within the ODB, Dutch Customs and business representatives discuss issues

relating to EU cross-border trade in goods in the broadest sense. Equivalence and mutual transparency form the basis of the dialogue between Customs, business and other Border Agencies. The Parties respect each other's responsibilities, interests and wishes, and, where possible, coordinate them. That way, an optimal balance between enforcement and trade facilitation is always jointly sought.

TRADE FACILITATION AS AN ATTITUDE

Facilitation can take various forms. In the definition of the Union Customs Code (UCC) this seems to be limited to physical checks, where goods are stopped and examined. It may seem that Customs is merely instructed to carry out these physical checks with as little hindrance to logistics as possible. But there are other ways to facilitate economic operators and the logistical handling of the flow of goods. For example, Customs may authorise simplifications of existing formalities and procedures after verifying that an that an economic operator offers sufficient guarantees. Customs can involve economic operators in the preparation of legislations and policymaking so that their wishes and the impact of regulations in practice can be considered at the earliest possible stage. Customs can even play an active role in a country's economic location policy so that streamlining customs procedures for imports and exports becomes a choice factor for economic operators.

There appears to be a contradiction in the constituent element of Customs' mission. On the one hand, in legislation, Customs is given a clearly defined supervisory role in which it must check compliance with tax, safety and security rules. At the same time, Customs must ensure a fair balance between Customs controls and the facilitation of legitimate trade. After all, trade does not benefit from and is certainly not facilitated by a disruption in the logistical handling of goods.

According to the current insights and the application of the system of Customs supervision developed on the basis of these insights, the supervisory task is primarily as follows: Customs stops goods imported or exported at the border and checks whether import taxes are paid to the correct amount, whether the import or export of the goods involves unfair or illegal trade, and whether the security of the European Union and its residents is at risk as a result of the import or export of the goods. Every time Customs stops goods at the border, it inevitably disrupts the logistical handling of the goods.

This is where Customs faces a challenge: one the one hand, it has the task of stopping goods to examine them and assessing declarations made for this purpose. On the other hand, Customs must minimise the delay and disruption to the logistical process. Carry out only those controls that are necessary, and carry them out in such a way as to cause the least possible disruption, that is the 'fair balance' between control and facilitation of legitimate trade. Thus, there is no contradiction in the constituent parts of Customs' mission.

SMART ENFORCEMENT RESULTS IN SMOOTH LOGISTICS

The permanent task of Customs is ensuring the right balance between effectiveness and efficiency.

- Effectiveness is supervision by stopping goods for checks only if it deems it necessary, based on sound information and risk analysis, to protect public interest in the areas of taxation, safety and security;
- Efficiency in supervision, by carrying out the controls it deems necessary as quickly as possible, within the logistical flow, with the minimum administrative burden, using innovative and preferably non-invasive detection technologies, in consultation and cooperation with the economic operators concerned, so that the controls interfere as little as possible with the logistical flow.

The Netherlands customs have introduced a long-term vision "Pushing Boundaries" in 2015, aiming at distinguishing legitimate traders and trade flows from the unknown. In supervising cross-border movements of goods, to this end, Customs makes optimum use of the available information on the goods being transported and the parties involved. It then analyses the potential risks associated with each movement of goods. Based on this analysis, Customs carries out checks in such a way as to ensure that the logistical flow of goods is only interrupted where this demonstrably necessary to protect the tax, safety and security interests of the Netherlands or the European Union. Customs must ensure that a check is carried out as efficiently as possible, the resulting delay is kept to a minimum, and the logistical handling can be resumed as soon as possible.

SMARTER DIGITALIZATION CONTRIBUTES TO TRADE FACILITATION

Customs makes increasing use of sensors. In the recent past humans were the most important sensors

of information, later sniffer dogs appeared and in the last decades technology delivered sensors such as infrared cameras, x-ray and mass spectrography. The next step, after these hardware sensors, is software development. First of all, software is needed to make the hardware function properly; but increasingly software is needed to access, organise, analyse and interpret the information collected from sensors and from other administrative (public) sources.

Algorithms and deep machine learning play a role in aspects of monitoring cross-border movements of goods: processing of data available to Customs.

This come from various sources:

- declarations submitted to Customs when the goods are assigned a customs destination;
- underlaying records and documents;
- results of physical or administrative checks;
- from other economic operators involved;
- from other inspection services;
- from foreign Customs administrations,

but also:

- from available open sources, as the internet;
- other public sources.

By the smarter (re)use of digital available (authentic) data Customs becomes a smart enforcer. Customs as a service that is well aware of the set of tasks entrusted to it and the apparent contradiction between parts of this set of tasks. By applying state-of-the-art technologies both in risk analysis and in control interventions deemed necessary, this service takes due account of the impact of a control intervention and, with this in mind, preferably uses non-invasive detection technologies.

In its vision Pushing Boundaries, the Netherlands Customs introduced the term 'autodetection', focusing on mechanism to distinguish legitimate from unknown trade flows, to support customs in increasing its efficiency in controls whilst at the same time reduce the burdens for known trusted traders and trade flows. Since this term was introduced, as we can see, many new technological developments have occurred, which made the

term autodetection move into a new dimension. Whereas initially this focused on mechanisms and technology to split the trade flows as explained, the technological developments lead to autodetection as an enforcement instrument in itself. Technology can assist Customs to detect risks in data, from various sources, declarations, commercial data and images. So, technology takes over part of the customs analytics work. Therefore, we move towards 'Pushing Boundaries, the next steps! Smart Enforcement and Smooth Logistics', the two legs of trade facilitation.

More on this and many other aspects of customs enforcement can be read in this book: "Customs, inside anywhere, insights everywhere.", ISBN 978-94-92881-75-5, available for worldwide shipping at: https://www.trichisboeken.nl/product/customs/.

Frank Heijman is Head of Trade Relations, Customs Administration of the Netherlands

Rob Chester
CEO ubloquity &
Supply Chain In-Sites (SCI)

Creating cross-border solutions
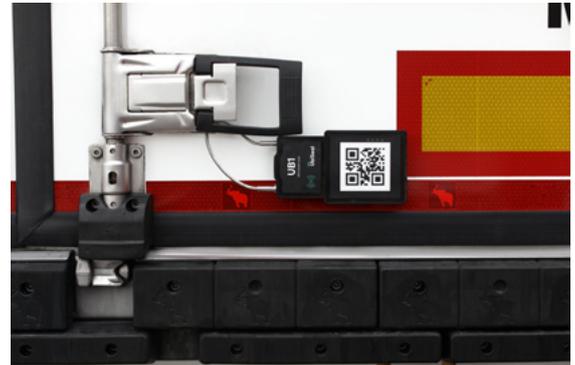
The UK imports and exports around £1 trillion of goods each year with the outside world. Up until Brexit, a large proportion of those goods moved seamlessly between Dover, south-east England and Calais in France, without checks at the border or the requirement for companies to complete paperwork in advance.

However, the decision to leave the EU created issues between the UK and its biggest trading partner.

RESTORING TRUST

Blockchain-enabled technology, combined with multifactor verification of critical data, is helping restore trust - and could see a return to frictionless trade. It also points the way toward the seamless movement of goods between the UK and all its trading partners.

A collaboration between Fujitsu, Entopy, B4B and Ubloquity has led to the creation of a unique end-to-end solution to improve transport security, by verifying the integrity of freight from point of loading to point of unloading.

Our solution - Atamai Freight - establishes a new level of collaboration and trust throughout the UK supply chain with the potential to make it easier to move goods across the GB-NI boundary, and also across the GB-EU border.

Atamai Freight unifies transport and goods information, while streamlining customs declarations. The platform captures GPS tracking data, connects it to the registered goods and customs information, and authenticates it using smart seal integrity, which provides real-time visibility of each journey and consignment.

This can then be securely shared with participating businesses and government authorities for each delivery, which can be verified via an online portal.

Following Brexit and the Northern Ireland Protocol, moving goods between GB and NI became more complicated – especially when transporting products of plant and animal origin. By unifying all the different elements of the supply chain on one platform, businesses can speed up processing at the port of entry and provide their customers with accurate arrival times.

The system is set up to enable pre-approval of goods, avoiding customs or regulatory checks entirely. Food manufacturers and suppliers can automatically complete complex customs procedures, saving time and money, making UK supply chains significantly more efficient. Over time, regulatory compliance will improve, and the need for authorities to manually 'stop and check' loads will diminish.

HOW DOES IT WORK?

Contents of all pallets on board a trailer are scanned and accurately added to a secure platform, creating a unique digital twin of that specific journey and its load.

All departing vehicles are individually fitted with a smart seal, securely locking in the contents while providing real time activity and geo location data via GPS to the platform, which is visible to regulatory bodies.

Alerts are generated so everyone within the connected supply chain can keep one step ahead of the product on its digitally mapped journey. The smart seal triggers a notification when the vehicle enters a geo fenced location, such as a five-mile radius from the border. This can be set to alert officials of an approaching load, where it originated from, what it contains, reference to its official and regulatory paperwork and where it is heading - reducing the need to carry out manual spot checks.

Blockchain ensures data you can trust, and provides trusted future audit capabilities.

Compliance is made easier.
Cut down on admin with centralised data.

Smart seals secure consignments.
Supporting load integrity.

Pre-notifications and tracking of port entry and exit help mitigate any delays.

Offers traceability and can help shelf life.

Improved visibility allows for proactive collaboration for all partners.

Reusable smart seals reduce the need for single-use plastic.

WHAT ARE THE BENEFITS TO COMPANIES AND GOVERNMENT AUTHORITIES?

The platform has multiple benefits. The data that is generated is validated and authenticated before it is timestamped and added to the blockchain. By doing so, the immutable data is creating an ecosystem of trust that can be relied upon not only by participating companies, but also regulators, customs officials and government departments – and critically trusted on both sides of the border.

Here is a summary of Atamai Freight benefits:

- A single view of every journey – goods manifest and certification documents are visible for each journey, increasing provenance in the supply chain, helping to reduce the frequency of customs checks at ports of exit and entry, or removing the need for checks completely. This supports 'just in time' supply chains and enables firms and governments (where required) to have greater visibility into the global supply chain, something that the Covid-19 pandemic demonstrated was lacking.
- Smart seal integrity – increased integrity of goods in transit with the ability to lock and unlock the trailer to named trusted individuals in predefined locations, and record who locked and unlocked a trailer, where and when.
- Manage arrivals in real time – GPS tracking provides real-time visibility of goods in transit. This enables businesses to dynamically plan and adjust operations around incidents and minimise the potential of delays at the border or ports.
- Blockchain-enabled verification and immutable traceability – the digital system creates trusted data that is independently verifiable, removing the need for manual checks at ports of entry and exit. Smart seals and telematics provide multifactor security and authentication.
- Compliance with regulations – before companies are accepted onto any Trusted Trader network, experienced trade and customs consultants ensure they can comply with all the necessary requirements of the UK Border Force, HM Revenue and Customs, the Department of Food, the Environment and Rural Affairs.
- Maintaining the integrity of UK customs territory – in some cases, such as the resolution of difficulties associated with trade between GB and NI, Atamai Freight enables governments to be confident that goods movements stay entirely within the UK customs territory. In turn this can support simplifications and facilitations which would apply to such trade, taking away this burden from traders.

ATAMAI FREIGHT IN PRACTICE:

Finnebrogue Artisan is one of the pioneering companies who tested the technology within its NI operations. Visibility of incoming consignments led to an immediate saving of operational man hours – which would typically be lost due to congestion at the loading bay, or idle time of warehouse workers awaiting a delayed load. Steve McKenry, Logistics Manager, Finnebrogue Artisan said:

"The simple fact that Finnebrogue can track our shipments from the point of collection to delivery

Here's how it works:

1. **Planning the journey** Route details including; points of loading and destinations, ferry crossing details and ports of exit and entry are submitted into Atamai ledger.

2. **At the point of collection** Vehicle details, consignment documentation and smart seal details are added to the Atamai ledger.

3. **Ready to go** With checks completed, the certifying officer attaches the smart seal, restricting trailer locking and unlocking to named individuals and geofenced locations.

4. **On the move** Real-time GPS journey data, consignment documentation and customs information can be securely shared with stakeholders who need to know.

5. **Approaching the port** Port authorities are notified in advance of precisely when vehicles are arriving, allowing them to assess consignment information before arrival and plan any checks required.

6. **On-board the ferry** Pre-arrival notifications allow port of entry officials to complete digital inspections and make risk-based assessments on the vehicles to select for inspection or pre-clear during sea crossings.

7. **Back on the road** Continue the journey to your destination with increasingly accurate arrival times flagged and finally, the completion of your journey recorded.

point in real-time means that we can more effectively plan our own resource and production.

"We can have our goods 'cleared forward' helping prevent delays in production. This gives us complete confidence in the integrity of the cold chain throughout its journey, allowing us to plan our own use of transport more effectively and in doing so reduce food miles and our own carbon footprint."

In conjunction with its consortium partners, ubloquity is seeking to build new and extended solutions aligned to the needs of government departments, for instance, trials are currently underway with the Cabinet Office, under the guise of the Ecosystem of Trust pilot, which can potentially sit on top of the Atamai blockchain platform.

As the results of those trials come to fruition, Atamai could become an enabler for the government to achieve its stated goal to deliver a "digital border, supporting businesses to import and export with ease and at low cost" by 2025.

Reflecting their commitment to invest in both their people and systems, leading logistics provider, Manfreight, has pioneered Atamai

Freight's Smart Seal Technology, benefiting customers through end-to-end visibility and integrity across each consignment delivery.

Chris Slowey, Managing Director, Manfreight said: "Some huge strides have been made in our mission to deliver frictionless trade between GB and Northern Ireland. This is all thanks to working with such innovative companies who share our vision to transform and digitise the supply chain."

ENABLING FRICTIONLESS TRADE

Our vision at ubloquity is to provide a more enhanced end-to-end cross border solution, particularly where physically protecting goods in transit alone, is insufficient. This is why we're committed to finding wider supply chain and border compliance solutions that help our customers drive greater efficiency in their operations. Being able to prove where something is from, authenticate what it is, validate how it was produced, and ensure its integrity in transit, will all become increasingly necessary in our pursuit of enabling frictionless trade.

For the last year, Rob has been running two start up businesses in the UK. ubloquity is an award-winning blockchain business that is already providing multiple solutions throughout supply chains. SCI is a certification body that's ready for the change that is coming to the certification world. Capable of dealing with all the ways that customers need risks to be managed. Rob previously ran NSF's business in the UK for five years, providing compliance solutions to most of the biggest food businesses in the UK. Prior to NSF, Rob worked for Walmart for twelve years. He started out in the UK, where he ran several compliance and risk functions. He then moved to China, where he lived and worked for three years as Walmart's Chief Compliance Officer. His final role at Walmart was in the United States where he ran compliance for its 5,000 US stores. Before joining Walmart, Rob worked at Tesco for 12 years. He began life as an hourly paid associate and worked his way up to being a store manager. He then moved into the Head Office Compliance function where he created and then implemented compliance and governance for Tesco's international operations. He holds a Law degree and Postgraduate Diploma in Legal Practice from the University of Central Lancashire. He lives in the UK with his wife Caroline.

By Dr Nakampe Michael Masiapato,
D Litt. et Phil. (UJ), Ph.D. (Wits),
Commissioner & Chief Executive Officer (CEO) of the
Border Management Authority (BMA), South Africa

Final steps towards the implementation of an Integrated Border Management Authority (BMA) in South Africa

BACKGROUND AND CONTEXT

After the promulgation of the Border Management Authority Act 2020, the government moved with speed to ensure the implementation of the Border Management Authority as the third law enforcement structure in South Africa. The BMA is responsible for the facilitation of the legitimate movement of persons and goods through the South African ports of entry and the border law enforcement area. To ensure its speedy implementation, his excellency President Ramaphosa appointed the Commissioner and two deputies, one for operations while the other is for Corporate Services, to drive the establishment of the Authority. Following their appointment, the Commissioner then moved quickly to ensure the establishment of BMA with effect from 1st April 2023. The BMA is expected to operate as an autonomous schedule 3(a) public entity in the ports of entry and the border law enforcement area in South Africa.

SIGNING OF THE PRESIDENTIAL PROCLAMATION FOR FUNCTION SHIFT

In order to legalize the move from a multi-agency approach into an integrated border management model with a single command and control, his excellency, President Cyril Ramaphosa signed the proclamation which moved the border law enforcement functions from the four South African government departments into the Border Management Authority. The proclamation affirmed the provisions of section 4(2) of the Border Management Authority Act which emphasizes that the border law enforcement functions should be exclusively done by the officers of the BMA. In fact, the signing of the proclamation enabled the BMA leadership to start the active engagements with the leadership of the respective four government departments. The engagements focused on the need for the identification of the affected staff members, the isolation of their respective tools of trade, including the isolation of the relevant financial resources covering both the compensation of employees and the operational budgets. In fact, the presidential proclamation allows for the shifting of functions from one government structure to another. As a result, the staff members who are responsible for the implementation of the shifted functions have to follow the functions.

ENGAGEMENTS WITH LABOUR ON THE PROTECTION OF WORKER'S RIGHTS IN THE TRANSITION

After the identification of the affected staff members, the BMA leadership started the process of engaging with labour under

the auspices of the Public Sector Coordinating Bargaining Council (PSCBC). This was critical in order to ensure the preservation and protection of the employees' conditions of services and benefits. During the engagement, the PSCBC agreed to form a BMA Task Team which is responsible for overseeing and supervising the implementation of the transitional arrangement. As such, an integration agreement was entered into between the government and labour in order to ensure the protection workers' rights in the entire process. In this phase, the BMA leadership was expected to provide regular feedback to the task team; and by extension to the council.

STAFF CONSULTATION PROCESS IN BOTH HEAD OFFICES AND 72 PORTS OF ENTRY

After the signing of the integration agreement between the employer and labour, the BMA leadership drove the staff consultation process from across the 72 ports of entry in all the three modalities of sea, land and air. The staff consultation process was started by hosting the leadership alignment symposium which brought all managers, supervisors and team leaders from all the 72 ports of entry from across the length and breath of the country. At the symposium, a comprehensive presentation was made on the rationale for the establishment of the BMA and its criticality in the quest to protect the country's national interest and secure its national security. As such, a number of issues were clarified with all the frontline leadership teams, after which they started

conversations in their respective ports on the need for the BMA and the nature of benefits it would bring in the port environment. After engaging leadership, a full programme was drawn to facilitate the staff engagement activities across all the nine provinces. During the staff engagement sessions, the biggest issues were centered around issues of Conditions of Service, salaries and the nature of benefit offerings for the BMA.

FINAL STEPS TOWARDS STAFF INTEGRATION FROM 4 DEPARTMENTS INTO THE BMA.

After extensive staff engagement sessions, each and every department had to conduct one on one sessions with their respective staff members through their departmental Human Resources. The key purpose is for the departments to offer their outgoing staff members the exit letters which reflect their existing salaries, and or benefits. Further dissections had to be made in order to isolate some outstanding labour related matters, package them and hand them over to the BMA for further processing. Up to this point, all hands are on deck as everybody is ready for the implementation of BMA from the 1st of April 2023. As the staff members come over, the BMA would give them new appointment letters with all the attributes of a law enforcement authority. Further, all the integrated staff members would be trained in the context of the embrace the new culture within a border law enforcement authority. On the 1st of April 2023, all the integrated staff members would let go of their old department uniforms and get

allocated an integrated uniform.

Considering South African problems of illicit trade, human trafficking, irregular migration and general interjuridictional crimes, it is important for the rest of humanity to support the implementation of BMA as we seek to develop a secure border for our country.

By Genevieve Lloyd,
Director of Communications,
Travizory

Securing African Borders: Leveraging mobile technologies to increase visibility and improve facilitation

Just last year, the South African Government announced plans to deploy Border Management Authority guards to vulnerable segments of the borderline[1]. The Government defended its decision as necessary to tackle "border security challenges impacting on the country and its neighbors" while critics saw this as a move to isolate South Africa from the rest of the continent.

As one of Africa's biggest and most popular destinations, the South African example effectively encapsulates the dichotomy of international travel and national security. Countries must stay open and attractive to foreigners but also remain vigilant and effectively screen travelers to ensure public safety and control immigration. Historically this has been attempted with different methods and technologies to varying degrees of success.

Today, artificial intelligence, biometrics and real-time data open a new world of opportunities for countries looking to adapt to modern threats. Evidence shows that strengthening vulnerable borders will go a long way to ensuring long-term stability and security, while supporting the recovery of tourism that many are anxious for.

Whether it's illegal migration, unregulated cross-border trade, terrorism or human trafficking, time and again we are reminded that no country exists in a vacuum. Joint efforts, improved data collection and information

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1   https://www.citizen.co.za/news/motsoaledi-border-management-home-affairs-minister

sharing have the capacity to help individual countries come together to tackle transnational crime.

## TOEING THE FINE LINE BETWEEN OPENNESS AND ISOLATION

Africa looks set for a grand tourism recovery in 2023, with a host of pan-African initiatives to increase traveler numbers and a UNWTO focus on "Tourism for inclusive growth". With about 900 million travelers last year, the UNWTO[2] forecasts tourist arrivals to reach up to 95% of pre-pandemic levels this year. While welcome, these increasing numbers also present facilitation challenges at ports of entry, and countries are faced with fierce competition from other destinations offering a world-class experience.

At the same time, growing pressure from international organizations such as the UN is forcing governments the world over to take stock and improve visibility and checks at the border. From February 2021, all UN member states are mandated to collect advance passenger data from airlines. Almost two years on from the deadline, only 72 countries around the world are compliant.

The situation in Africa is even more stark. Despite a myriad of cross-border challenges and significant security threats over recent decades, the Seychelles - the smallest country in Africa - is currently one of only three African countries to comply with the API-PNR mandate.

The question therefore remains, can a country do both: remain an open destination for tourists while meeting increasingly stringent standards for security?

In short, yes. Strengthening
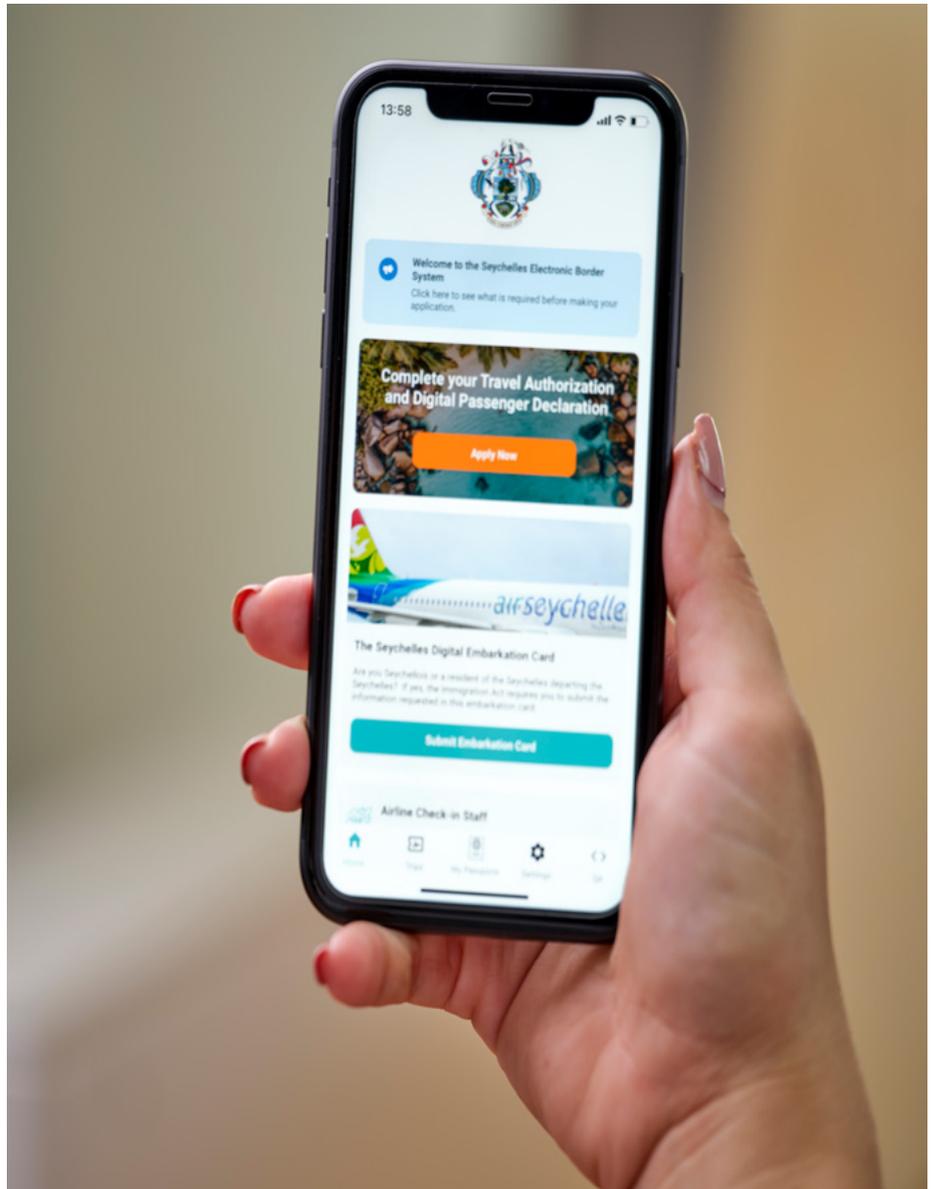
security by reinforcing border checks on the one hand actually supports the promotion of a country as a safe tourist destination, and in turn attracts greater numbers of tourists. Smarter security processes will also facilitate arrivals, giving travelers clarity in advance as to whether they can enter the country, therefore contributing to a digital-first travel experience that many are becoming more and more accustomed to.

REALITY CHECK: TIME, MONEY, RESOURCES

Shifting approaches to border security can be a win/win scenario for African nations, but very real limitations have prevented much progress from being made.

Many countries don't have the time, in-country expertise or budget to overhaul their border systems, especially while threats are constantly evolving and emerging. Installing new technologies, training Border Agents and developing a robust legal framework for the collection of such data is almost impossible in many cases, and certainly not possible in a reasonable timeframe.

Recognising this reality, governments must explore new avenues and technologies to fix the problem. Hi-tech startups like Travizory have developed solutions that require little to no upfront investment and are quickly deployed in a bid to bypass these very real limitations.

THE BLUEPRINT: SEYCHELLES ELECTRONIC BORDER SYSTEM

Leveraging new technology is precisely how the smallest country in Africa positioned itself as a leader in border technology. The only country on the continent with walk-through biometrics on arrival, the Seychelles' solution occupies the intersection between efficient data collection while preserving privacy, enhancing pre-travel risk-assessment and guaranteeing seamless facilitation.

Boasting tangible results, the combination of an electronic Travel Authorization and API-PNR system is a winning formula for the island nation. Supplementing the standard API-PNR data sets with biographic and biometric data directly from the travelers delivers a unique and in-depth view of each passenger before they board. All accessed via a single portal, border agents are able to review, vet and approve individuals in a collaborative and transparent way.

Up and running within 4 weeks, the agile technology not only gave Seychelles Authorities unprecedented visibility of travelers before they arrived but it also had a significant impact on the arrival process, cutting passenger screening times from 84 minutes per plane to just 8 minutes. Overall processing for a full flight of 250 passengers now only takes 35 minutes, well below the ICAO standard of 45 minutes per aircraft. That this was all achieved at the height of the pandemic is testament to the flexibility and customizability of the technology from Travizory.

Other countries on the continent have attempted to roll out pre-screening platforms of their own,

but none with the same levels of success. A number of countries have rolled out eVisa systems with a view to opening up to new international markets, but tech struggles continue to hamper these efforts[3]. From backlogs and payment issues in South Africa and Kenya, website outages in Botswana to a six-month delay in implementing a Visa waiver due to configuration issues in Zambia - it is clear these incidents are not isolated.

By contrast, since launching its Travel Authorization over 2 years ago, the Seychelles has not faced similar delays or outages. The unique combination of biographic and biometric data enables biometric watchlist matching and AI-enabled identity verification and document validation. The system automatically flags any high-risk traveler and uses artificial intelligence to enable predictive profiling - learning from past encounters and experiences to flag future travelers that fit a similar profile.

Ultimately this allows border agencies to be smarter with their time and resources. Instead of focusing attention on 100% of travelers, the system vets the 99% that pose no risk and flags the 1% that are deemed high risk.

BORDER TECH: AFRICA'S NEXT FRONTIER

African governments needn't reinvent the wheel - the technologies exist and the solutions have already been developed, tried and tested. In fact, mobile-based border technologies are a perfect match, with African countries already leading the way in terms of mobile use, leapfrogging other technologies in the process.

What Seychelles offers to the

rest of the continent is a blueprint for innovating and adapting to the border challenges of the day. Working with technology experts like Travizory, Seychelles avoided the pitfalls of cumbersome legacy solutions and resource-intensive in-house solutions and leveraged the decades of specialist knowledge their partner could provide.

The right technology can catapult Africa's borders into 2023, enhancing security, increasing efficiency and improving facilitation in one go.

Genevieve Lloyd, Director of Communications, Travizory Genevieve is Travizory's Director of Communications, helping to build the Travizory brand and engage with Governments across the world. Genevieve has extensive experience in corporate communications and government relations and has worked for a number of multinational companies within the tech, financial services and energy sectors.

3   https://skift.com/2022/12/09/africas-tourism-recovery-hindered-by-e-visa-delays/

Patricia Bell MBE
Border Management Consultant

An Immigration Intelligence Capability for Lesotho

A consensus has formed around the conclusion that the future of safe and secure border management is seamless travel aided by technology, systems, and intelligence.

However, how can countries with few facilities and little technology infrastructure like the Kingdom of Lesotho, identify and manage the immigration risk to its borders?

A comprehensive IOM project during 2021 & 2022 with financial support from the Government of Japan was designed to help the Lesotho Department of Immigration in the development, implementation and establishment of an immigration inspection unit and strengthened immigration intelligence.

Lesotho has the 'highest lowest point' of any country. No other nation can claim a base altitude as lofty as Lesotho's – 4,593ft (1,400m). It is the only independent state on the planet which exists entirely above 1,000m (3,281ft). Hence its nickname 'Kingdom of the Sky'

The Kingdom of Lesotho covers 30,355 km2, more than 80 percent of which is above 1,800 metres. Its lowest point lies at 1,400 metres. The border between Lesotho and South Africa is about 900 km. long, following the Caledon River, the drainage divide of the Drakensburg Mountains, the Tele, Orange and Makhaleng Rivers, and hills between the Makhaleng and the Caledon. Lesotho's geographic location makes it extremely vulnerable to political and economic developments in South Africa, as it is entirely surrounded by that larger and more prosperous country.

The Immigration Department is the oldest department in the Ministry of Home Affairs and has circa 150 officers. It deals with controlling the borders, of which there are 14 points with South Africa, the issuing of entry visas (Lesotho has an on-line 'e visa' system), regulation of stay and citizenship.

Eight of these posts are automated in that they have access to the BMS (Border Management System) that can scan passports and take biometrics. Of the six remaining border crossings five have manual systems where all data is entered into registers. Two of the six un-automated border posts are not manned by immigration officers, they have customs and police presence. One is not manned at all due to its terrain. Maseru and Maputsoe are the busiest crossings.

There are a further eight unofficial border crossings. At these 'community crossings', significant numbers of local residents on both sides of the border are known to cross into the other country and return without any border inspections. These unofficial crossings are suspected of being used for human trafficking and people smuggling and contraband.

The Kingdom of Lesotho has only one international airport, the King Moshoeshoe I International Airport which receives two arrival and two departure flights between Maseru and Johannesburg a day.

Lesotho has robust legislation and regulations to support anti trafficking in persons and migrant smuggling actions and initiatives. It is also a signatory to UN protocols and conventions that provide further platforms to assist victims and to tackle these serious crimes

Trafficking can seem to be voluntary in that a person takes a job as a domestic worker overseas or in a different part of their country under the promise of a good salary, good working conditions and benefits. However, the person is then subjected to degrading work conditions and does not receive a salary. Trafficking encompasses the recruitment, transportation and harbouring of a person, and deception has been employed for the purpose of labour exploitation.

In contrast to human trafficking that can take place both domestically and internationally; migrant smuggling is a crime that takes place only across borders. It consists of assisting migrants to enter or stay in a country illegally, for financial or material gain. Smuggling of migrants is designed to bypass the official entry requirements and border controls of the destination country. Smugglers make a profitable business out of migrants' need and or desire to enter a country and their lack of legal documents to do so.

Lesotho presents complex and volatile population mobility patterns which can exacerbate existing levels of human vulnerability and heighten national security concerns. Lesotho continues to be a country of origin, transit, and destination for human trafficking.

Smuggling of migrants can result in those smuggled becoming victims of trafficking. Lesotho struggles to address the issue of irregular migration, lacking the relevant information about crime networks involved in people smuggling and trafficking. Lesotho also continues to require increased capacities to manage its porous borders and strengthen its border control.

Enhancing the capacity to identify persons who are being smuggled or trafficked was the purpose of the United Nations International Organisation for Migration (IOM) project to assist in the development, implementation and establishment of an immigration inspection unit and strengthened immigration intelligence. The identification and investigation of smugglers and traffickers will additionally provide protection for migrants and ensure that trafficked persons and smuggled migrants are not treated as criminals and are afforded the protection they need.

The effective collection of information and data will provide evidence-based criteria to support risk profiles, identify high, medium, and low risk threats, and align strategic priorities and operational responses effectively and efficiently. It will also assist in developing sustainable mitigation and protection strategies.

The IOM project provided a suite of reports and documents to assist with implementing an immigration intelligence unit. These included a strategic assessment to identify current risks and threats, a control strategy to inform priorities, intelligence collection plans for strategic, operational, and thematic risks and threats, and the development of risk matrix to identify priorities ,and risk registers to report on risks to delivery.

The Immigration Intelligence Unit operating model covered the following:

- Identifying intelligence requirements for strategic, operational, and business planning
- Collection of data and information
- Processing of data and information
- Analysis and provision of relevant reporting
- Dissemination of intelligence and reporting

- Development of feedback processes to inform future reporting
- The provision of intelligence awareness and training to cross government border officials and law enforcement, to include data and information sharing processes, relevant legislation, trafficking and smuggling indicators and risk profiles.

Additionally, the project provided guidance on UN protocols and conventions covering trafficking and people smuggling, data protection, a comprehensive intelligence unit operating manual, governance and terms of reference documents for the unit, and an array of templates for strategic, operational, and thematic intelligence gathering.

Two training courses to assist the Department of Immigration to become an intelligence led organisation were held. One, a virtual course held in 2021 for Department of Immigration Officers, and one in Maseru in September 2022 for an array of border control government departments including immigration managers and border officers, Lesotho Mounted Police Service, Customs and National Security Service officers ,and the Passport Office. This course was attended by the Director of Immigration and the Home Affairs Permanent Secretary.

The latter course was an intensive look at worldwide accepted intelligence processes, and information and data sharing mechanisms, plus it provided strategies to quantify and qualify the risks encountered at the border and in-country, to benefit strategic and tactical responses and resource allocation.

Of importance is that while the course concentrated on immigration risks, the processes that were trained are applicable across all the government departments and law enforcement agencies represented on the course plus Customs and all other agencies involved in border control and after entry activity.

The primary goal of intelligence processes and the resulting reporting products are to inform all levels of government and law enforcement, and to provide mechanisms to share information securely in accordance with the protocols and rules of each agency.

Some of the attendees had experience of intelligence working and these sessions were primarily designed to facilitate and encourage information and data sharing between the agencies and to provide the tools and processes to do so.

The delegates were also introduced to 'risk use cases' These have been designed to map the traveller's journey (and can also be used for goods and freight) and by using risk indicators border officials can identify points of risk and threat, and preventative and mitigating action can be taken.

Finally, action plans for the immigration intelligence unit and for inter-agency collaboration & intelligence information sharing were produced to assist the Lesotho Department of Immigration on the road to becoming 'intelligence led'.

Patricia Bell MBE is a border management expert specialising in processes and strategies to identify risks and threats. These tools can be used across diverse disciplines.

JOIN THE GROWING IBMATA FAMILY

Who can join?

Supplier and Transportation Companies

- Transportation companies (including airlines, shipping companies, rail operators, freight forwarders) with a legitimate interest in supporting our aim;

- Port, airport, and other management entities with a legitimate interest in supporting our aim; and

- Those technology suppliers, business integrators and other private sector entities who, in the opinion of the Board, support the safe and secure movement of people and goods across international borders whilst facilitating flow, in accordance with the aims of the organisation.

Public Sector Organisations and Academics

- All Government Departments and Agencies charged with the responsibility of managing the international movement of people, goods and materials across national borders; including pre-entry, on-entry and after entry applications;

- Intergovernmental organisations with a vested interest in the management of people and goods across international borders;

- Non-governmental organisations with a vested interest in the management of people and goods across international borders and legitimate academic organisations and research facilities.

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