

NLLC21 Magazine

Lessons Learned in a Global Crisis

Welcomes from the JALLC's Commander and Supreme Allied Commander Transformation

Facing the Challenge: Deputy Secretary General addresses NLLC21

National and Partner Perspectives

NASA and the NATO Science and Technology Organization give their views on Lessons during the COVID-19 pandemic

Delivering Lessons Learned during COVID-19

Innovating the NATO Lessons Learned Capability for the Future

And lots more!



NATO Lessons Learned Conference 2021
Hosted Online by the
Joint Analysis and Lessons Learned Centre



Contents

Editorial

Just a quick word from me to say what a pleasure it has been to work on this special edition of the NATO Lessons Learned Conference: our first online edition.

Although, I have to say that, I wish the circumstances had not required us to have had to hold this event online, I am proud to have been part of it and I hope that those who participated and attended, enjoyed it as much as we, the NLLC21 Team, did.

This magazine is not intended to report on the event. It is intended to give those who attended the NLLC21 a reminder of what we achieved and for those that could not attend, a flavour of what was shared, discussed, agreed, and disagreed on.

I think we can safely say that this event was a success. There is always a learning curve in everything we do and every NLLC I participate in I learn a little more about what we as an organization can achieve if we put our minds to it. Not much stops this Alliance; not even a global viral pandemic.

A final thanks to Naina Azimov, my intern during the NLLC21, who worked tirelessly during her six months with the JALLC to ensure that this event and this magazine happened. Thanks.

See you all at the next NLLC.

Jodie Lazell



04

**Welcome from
COM JALLC**



06

**Opening by
SACT**



08

**Facing the
Challenge:
DSECGEN**



10

**The final
frontier: NASA's
Lessons**

11

**Military impacts
of COVID-19: STO**

12

**National
Perspectives**

14

**Partner
Perspectives**

16

**Delivering LL
during
COVID-19**

18

**Innovating the
NATO LL
Capability**

20

**NLLC21
Breakout
Sessions**

22

**NLLC21 Behind
the Scenes**

26

**The NLLC21
Logo Story**

27

**NLLC21 Online:
Attendify**

28

NLLC21 Agenda

30

**Who is Who?
NLLC21 Bios**

38

**NLLC21 @ a
Glance**

Welcome from Commander JALLC

BGEN Bogdan Cernat, Romanian Army

I'd like to welcome you all to this magazine covering the NATO Lessons Learned Conference 2021 (NLLC 21) which took place from 16 to 18 March. This was a first for the JALLC: the first time we are presenting the NATO Lessons Learned Conference (NLLC) online. Presenting from our studio in the JALLC building in Lisbon, Portugal, made me realize how apt the theme of the conference really was:

Lessons Learned in a Global Crisis: what did we learn and how can we do better?



Because the very fact that the NLLC21 was presented as an online event is a direct example of how we as an organization adapted to events surrounding us and learned from it; applying what we've learned as an organization to ensure that this Alliance remains strong and resilient in the face of any global crisis.

I think the main lesson I have learned is that, we as an Alliance are not prepared to let any global crisis, be it a viral pandemic or some other future crisis, get in the way of what we believe in: that together We Are Stronger, We Are Resilient, We Are NATO. The fact that we were all determined to have this event take place, to gather in cyber space if we can't gather in person, to learn from and share with each other, is what makes me believe that we will overcome this global crisis as we have overcome every other crisis in the past; and so far, we have overcome every crisis we have faced: we're still here; that's a 100% track record.

And as we are all aware; it hasn't been easy. We saw during this conference that we have all faced many of the same challenges and come up with some ingenious solutions.

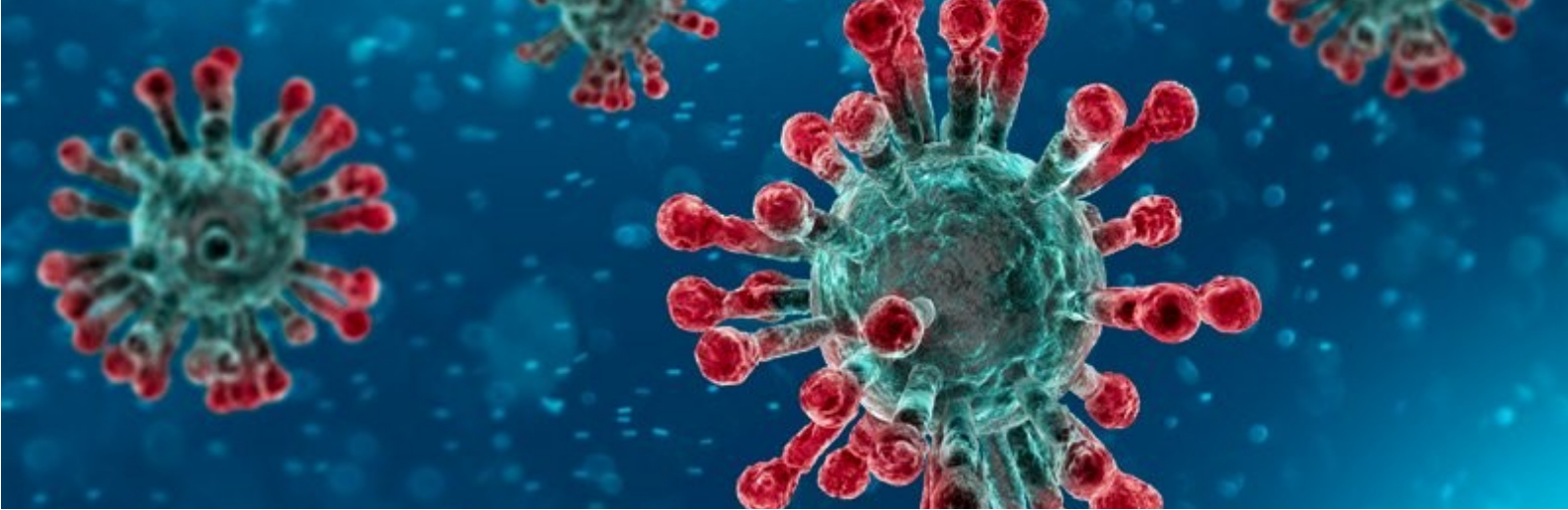


The NLLC21 team put together a fantastic array of speakers and presenters. We heard from such a wide variety of people: from our leaders, and from experts; from within NATO and outside the organization; from Allies and from Partners. The one thing we have in common is that we *all* experienced the COVID-19 pandemic, we *all* experienced this global crisis. And that is perhaps what makes this opportunity to learn from it so unique: we are *all* facing the same enemy: even if it is an invisible one. Every nation has been threatened; every nation has been touched; every nation must now learn. The theme of this conference was certainly pertinent. I think the common thought that came back time and time again during the event was that timeless quote from Winston Churchill:

“Never let a good crisis go to waste”

As Deputy Secretary General reminded us: NATO's priority during the COVID-19 pandemic was to ensure that a potential health crisis did not turn into a security one. And we succeeded there. We learned our lessons from previous crises like floods, fires, and earthquakes and we responded; effectively. BUT, let there be no doubt, we were not READY; not for this.

There is so much to learn.



We often speak about the importance of leadership to Lessons Learned in NATO and this edition of the NLLC was honoured by many of our leaders wanting to address you, the NATO Lessons Learned Community. But our leadership, in turn, noted the importance of the engagement of the NATO Lessons Learned Community to make their leadership impactful.

Rear Admiral (RADM) Robinson noted that the Lessons Learned community is moving rapidly in the right direction, changing the way we deliver Lessons Learned. This makes it easier for leadership to really embrace Lessons Learned as part of the daily routine, as part of the NATO culture. After nearly two years as commander of the JALLC, I feel that we all have a duty to boldly pursue the need to shape NATO's organizational culture to make the Lessons Learned mind-set a reality at all levels throughout the Alliance. And it seems I am not alone in this.

LTC Robert Kiely from the Irish Defence Forces echoed a sentiment that many of us felt during the pandemic: the need to change the Lessons Learned mindset from seeing failure as a negative thing and part of a blame culture to a *just culture*: something more positive and elevated where we can recognize failure as part of the learning process. Let's not let our fear of failure jeopardize our ability to innovate

I think we have seen throughout this event that NATO has great capacity to adapt to any situation; quite rapidly when we need to. This global crisis has shown that we can rethink the way we work, repurpose resources, and embrace technology to ensure the organization is fit for whatever purpose it needs be fit for.

Can we do it better?

Yes we can, is the answer coming from this event.

We have seen so many innovative solutions being developed in NATO that have been useful during the pandemic. Such as hologram communication,

virtual training, augmented reality, and many others. But we still have a long way to go. For example, it was noted a few times during the event that the NLLC21 platform was yet another in a series of conference platforms we have had to master over the past year. And that is the case for many technological solutions to the challenges we faced. There are no "enterprise" solutions to these challenges yet. But this global crisis has highlighted more than ever the need for One NATO solutions to Whole of NATO problems.

I've also spoken to many of you about the future, and leveraging what we have learned from this year. Some of the solutions we have put in place during the pandemic have the potential to carry forward to improve Alliance efficiency in the future. There is some irony to this: the solutions we've put in place to ensure distance now, may actually bring us closer together in the long run.

The NLLC21 was a huge success. I'd like to thank my staff for all of their efforts to make it happen. I'd also like to thank all of the speakers, presenters, and attendees who were incredibly active on the NLLC21 platform throughout the event and really "made" the content truly useful for the whole of NATO. We will use all of it to ensure NATO learns from this global crisis.

I hope to see you in person at the next event.

Stay safe.



Supreme Allied Commander Transformation, General André Lanata, opened NLLC21 live from HQ SACT, Norfolk, Virginia, encouraging the NATO Lessons Learned Community to use the COVID-19 pandemic as a driver for NATO's evolution and adaptation.



— NATO'S WARFARE DEVELOPMENT COMMAND —

Opening Remarks: Evolution and Adaptation

General André Lanata



The first guest speaker on the NLLC21 platform was Supreme Allied Commander Transformation (SACT), General André Lanata. Speaking live from HQ SACT, General Lanata noted that although the COVID-19 pandemic has presented many challenges over the past year, it has also presented us with many opportunities to adapt—quickly—to the circumstances. He also noted that the COVID-19 pandemic was not the only challenge we faced as an Alliance, referring to the evolving threat environment and the nature of war.

He encouraged the NATO Lessons Learned Community to consider how it can contribute to the process of implementing the NATO Warfighting Capstone Concept, which will guide NATO's proactive adaptation and represents an answer at the Warfare Development level to the evolving threat context. He invited participants to debate how we collectively face this evolving environment and the "way ahead" for the NATO Lessons Learned community in it.

This year the main focus of the conference was improving NATO's Lessons Learned Capability to enhance NATO's Warfighting Capability. Lessons Learned are one of the essential strands of warfare development activities, and ensuring that the NATO Lessons Learned Process is always improving is vital for the support of our warfighters. He also noted that the incentive for adaptation always came from an objective analysis of what could be improved. And this, he said, is the core mission of the NATO Lessons Learned Community for the benefit of our warfighters: to add value to our warfighters and to warfare development through the NATO Lessons Learned network.

General Lanata also commented on the good work done to evolve the NATO Lessons Learned Process and Capability and that the way ahead for the NATO Lessons Learned Community must be to

continue that process to ensure NATO remains agile in all aspects, including in Lessons Learned.

Finally, he gave the audience some questions to consider during the event covering aspects of Lessons Learned such as the scope, the responsiveness, the need for strategic level lessons and our ability to reach out.

SACT finished his address by encouraging the audience to bring and discuss their ideas, and make use of the excellent opportunity to take an active role in shaping improvements to NATO's Lessons Learned Capability, noting that the vitality of the network will be the key for success in this domain.

“Although the COVID-19 pandemic has presented us with many challenges over the past year, it has also presented us with many opportunities.”

Facing the Challenge

HE Mircea Geoana

NATO Deputy Secretary General

[Click here for the full transcript/audio](#)

NATO's Deputy Secretary General, Ambassador Mircea Geoană took time out from his busy schedule to address the NLLC21 audience. As NATO's political Lessons Learned champion he spoke frankly to the audience, noting that although we were successful at not letting the health crisis become a security one, NATO was not ready for a crisis like this.

The NLLC21 was deeply honoured to have Deputy Secretary General (DSG), Ambassador Mircea Geoană, speak to the audience on the topic of the COVID-19 pandemic and NATO's handling of crises more generally. Speaking live from the NATO HQ studio in Brussels, DSG connected to the NLLC21 platform on the first day of the conference to address, inspire, and encourage the audience to take advantage of the opportunity provided by the online LL event.

Ambassador Geoană began by noting that the global pandemic has had such a huge impact on every corner of the world and every part of society. It has also had a significant impact on NATO – our Allies and partners, and our missions and operations. But despite the enormous challenge of COVID-19, we have proven to be resilient and able to cope with whatever it has sent our way.

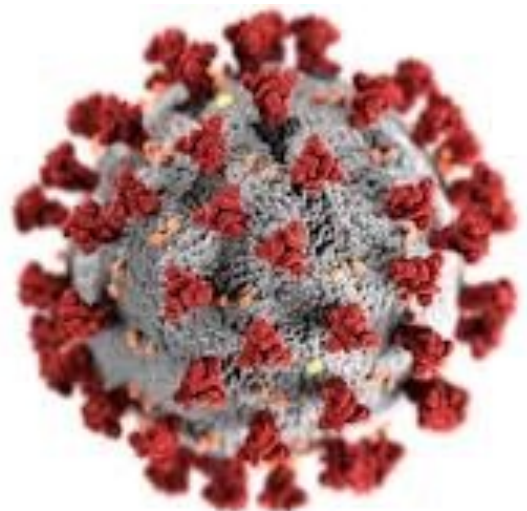
Of course, during the pandemic, NATO's number one priority has been to ensure that this health crisis does not become a security crisis. DSG noted that NATO has been successful in this: our forces remain vigilant and ready to defend all Allies against any threat. We have done what is necessary to keep our forces safe, to maintain our operational readiness, and sustain our missions and operations.

But he also noted that our success in this area has not stopped the COVID-19 pandemic from being a significant challenge. The last time our nations dealt with a pandemic on this scale was more than a hundred years ago, when the Spanish Flu swept the globe at the end of the First World War. So when COVID-19 struck, the thirst for information, for expertise, and for best practice was insatiable. And the lessons NATO had learned from previous crises where NATO had supported civilian authorities proved invaluable.

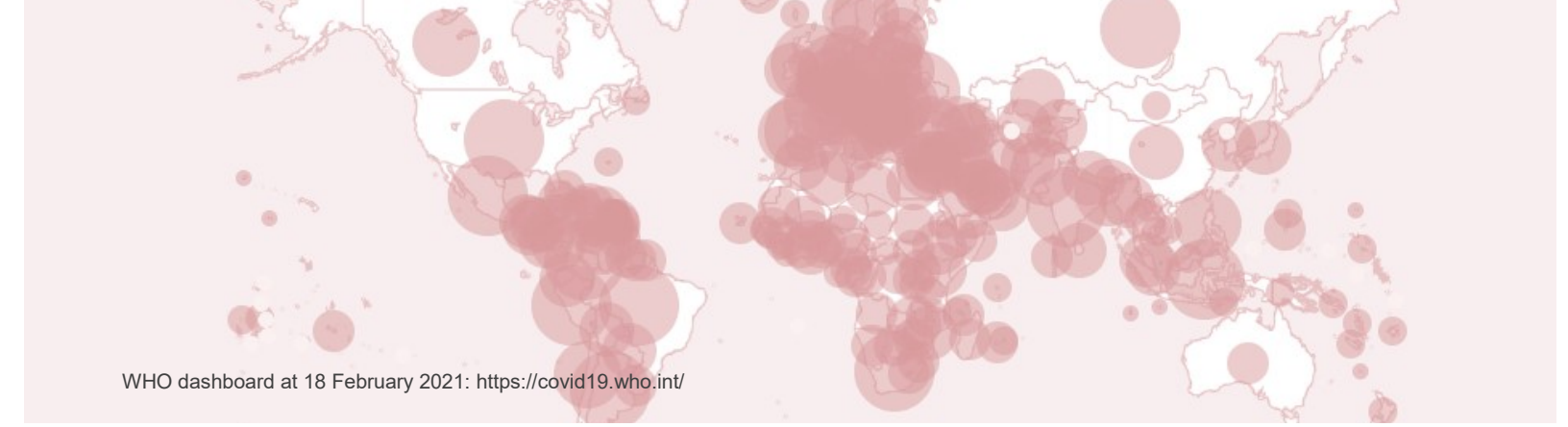
The COVID-19 pandemic has shown the effectiveness of NATO's multinational solutions, and our ability to share information and with other international organizations, such as the United Nations Office for the Coordination of Humanitarian Affairs, the World Food Programme and, of course, the European Union. Regular communication has meant we could avoid duplication and collaborate when appropriate.

But not everything has been as successful. As Ambassador Geoană pointed out, the truth is, we were not adequately prepared for something on this scale. Despite the warnings of experts over many decades, many nations lacked the plans and equipment necessary to deal with the pandemic when it hit.

Measures that had been taken to increase efficiency and reduce costs did not work under pressure and the global



We need to learn the lessons from this crisis now so that when the next crisis hits – and it will – we are ready.



WHO dashboard at 18 February 2021: <https://covid19.who.int/>

market could not cope with the sudden increased need for equipment and supplies. The lesson is clear, NATO and Allies need to be better prepared, with our own stockpiles of essential supplies, independent of a fallible supply chain. This is not only vital for a future pandemic, but for other potential crises, including Article 5 events where we can no longer rely on buying from the open market. Learning the lessons of each crisis and looking ahead to imagine the next, however terrible, is an essential part of maintaining the security of NATO's nearly one billion people.

Our lesson learning capability is an invaluable resource. We can and we must do more to make sure lessons are identified, learned, and implemented so that the future leaders of our Alliance can draw upon the best advice and adequate resources should the need arise. The COVID-19 pandemic has been a valuable stress test for NATO's lesson learning capability. They say you should never let a crisis go to waste. We cannot do so now.

DSG went on to highlight some of the other challenges that NATO is facing and that to overcome all of these challenges and not just the current one, it will be important for the Alliance to stand together, not just as an organization, but as a whole of society effort to ensure we are less vulnerable in the future.

Finally he noted that we need to take our culture of lesson learning further too. To imbed it deeply within our training and support, our missions and operations and within our headquarters. Technology makes this job easier, and we need to embrace new technologies and systems that can help us in this task. But more important is leadership and the political will to not only learn lessons, but to follow through. To take decisions and to act to make things better.

“...the global pandemic has had such a huge impact on every corner of the world and every part of society...”

But despite the enormous challenge of COVID-19, we have proven to be resilient and able to cope with whatever it has sent our way.”



With Space being added as one of the “new” military domains to the traditional Air, Land, and Sea domains, it seemed only appropriate that at this NLLC21 we found out what lessons had been learned from the Space experts; none other than the folks at NASA.

Dr. James D. Polk, NASA’s Chief Health and Medical Officer, spoke live to the audience about how NASA had managed to execute several high-risk missions despite the COVID-19 pandemic.

Missions included flights to the International Space Station, preparing for the next trip to the Moon, and executing the recent bullseye landing on Mars. NASA continued “business as usual” while keeping astronauts, engineers, and employees COVID-19 safe.

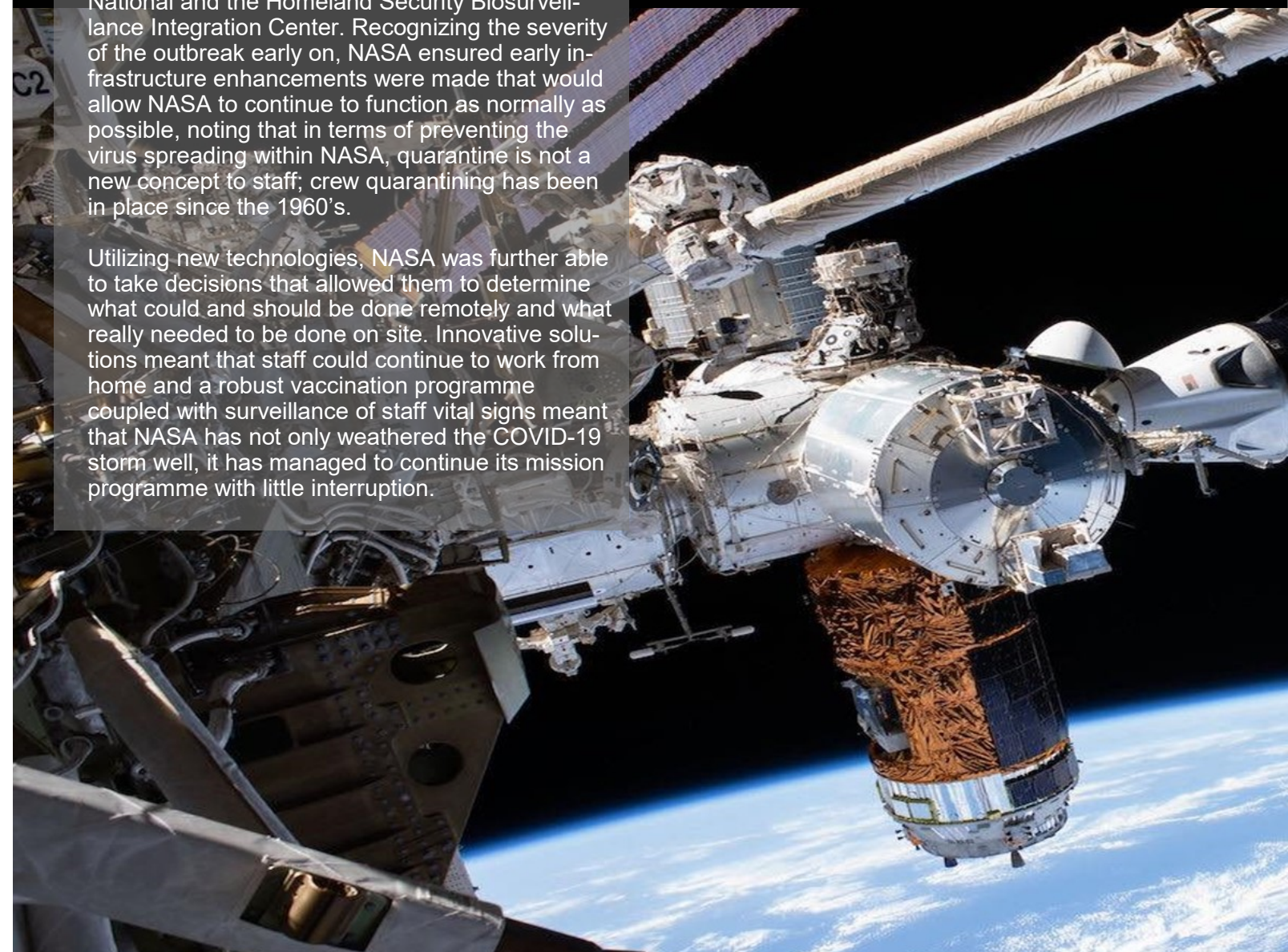
To achieve this, NASA utilized medical intelligence from the World Health Organization, Centers for Disease Control and Prevention, and US National and the Homeland Security Biosurveillance Integration Center. Recognizing the severity of the outbreak early on, NASA ensured early infrastructure enhancements were made that would allow NASA to continue to function as normally as possible, noting that in terms of preventing the virus spreading within NASA, quarantine is not a new concept to staff; crew quarantining has been in place since the 1960’s.

Utilizing new technologies, NASA was further able to take decisions that allowed them to determine what could and should be done remotely and what really needed to be done on site. Innovative solutions meant that staff could continue to work from home and a robust vaccination programme coupled with surveillance of staff vital signs meant that NASA has not only weathered the COVID-19 storm well, it has managed to continue its mission programme with little interruption.

The Final Frontier

Executing High Risk Missions during a Pandemic

Dr. James D. Polk, NASA's Chief Health and Medical Officer





The Military Impacts of COVID-19 on the Alliance: Challenges and Opportunities

organization

General (Retd) Sverre Diesen

General (Retd) Sverre Diesen from the NATO Science and Technology Organization delivered a presentation on The Military Impacts of COVID-19 on the Alliance: Challenges and Opportunities. He provided the audience with a background on the STO's recent report, the methodology used, key findings, and several Lessons Identified regarding the research process.

Gen Diesen explained to the audience that the report was the result of a challenge from the Chief Scientist to assess the progress of STO's support to NATO's efforts to counter COVID-19. The SAS Panel—the governing body of this branch of the STO—met in April last year and decided to create a Specialist Team to look at this problem which would, “analyse the possible futures for the Post-COVID-19 environment and determine potential impacts on the military order.” The intent was for the report to inform strategic and operational level planners and decision makers in both NATO and the Nations.

Two analytical frameworks were developed: one to describe a spectrum of possible futures one to six years out, ranging from a best to a worst case with a baseline future somewhere in the middle; and one framework to assess the military impacts of these futures, again using a best, worst and baseline case approach. The same dimensions as those frequently used in other foresight studies, i.e. the economic, political, social and scientific & technological were used for these frameworks, taking a special look at certain regions in particular. This framework was then populated by analysing the impact of the three courses of the pandemic across all the dimensions.

Chief recommendations from the report include: •

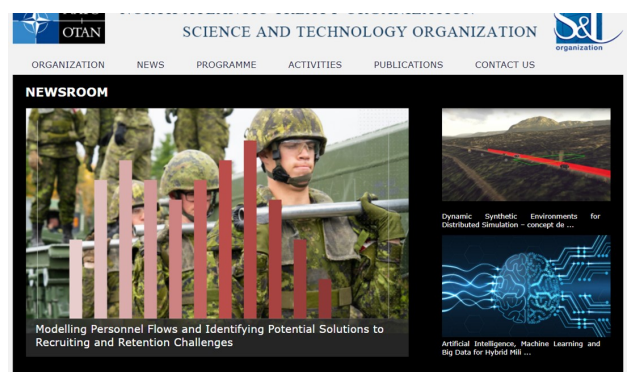
- Establish a “pandemic code of conduct” pertaining to HQs, deployment and operations, and training and exercises; and
- Assess short-term impacts of modifications to training and exercises on preparedness of military forces and potentially longer-term consequences for readiness and interoperability.

Specific J7, Exercises and Training related recommendations include:

- A rigorous risk analysis should be performed to look into avoiding unnecessary cancellation of exercises, weighing benefits against risks; and
- Mechanisms for sharing COVID-19 related information about individuals participating in NATO exercises should be developed.

General Diesen finished his presentation with some Lessons Identified noting that one of the challenges had been that the study was in many ways like shooting at a moving target as the course of the pandemic was continually changing.

You can find out more on the STO by clicking on the image below or heading over to www.sto.nato.int.



NATIONAL PERSPECTIVES

The first Panel of the NLLC21 was moderated by Group Captain Neil Cummins, Head of the Lessons Learned Analysis Division at the JALLC. The Panel was intended to show-case how Spain, Italy, Portugal, and the United Kingdom faced the many challenges that arose for all Nations during the COVID-19 pandemic and how the national armed forces contributed to the efforts to combat it. Below we summarize some of the activities that the representatives presented to the NLLC21 Audience.

The Spanish Perspective

BGEN Francisco Javier Vidal Fernandez ACOS OPS, ESP Operations Command depicted how the Prime Minister, Defence Ministry, Interior Ministry, Transport & Mobility Ministry and Health Ministry were involved in Operation BALMIS, the biggest military effort during peacetime on Spanish soil. The main tasks covered the disinfection of retirement homes, airports, train stations, institutional buildings, penitentiaries, big markets, and bus stops. Moreover, the Spanish defence forces provided logistic support to: strategic airlifts to China in order to assist protective mask production, construct hotels for the homeless, and transporting food. In addition, Spanish Armed Forces contributed to the enlargement of medical facilities by providing tents and beds, mobile vaccination teams, and Medical Evacuation (MEDEVAC) as well as border patrol activities, protection of critical infrastructures from cyber-attacks, especially nuclear plants and health system.

The Italian Perspective

COL David Morpurgo Head of International Relations Office, Italian Defense General Staff elaborated on Italian Armed Forces' activities and cooperation with other civil agencies to contain the COVID-19 pandemic and assist the population. A COVID-19 Situation Room and Task Force were stood-up to coordinate with the Armed Forces and Health Inspectorate. Italian Defence contributed by redeploying 470 military doctors, nurses, and technical workers, by providing over 3000 vehicles, hundreds of internal and global flights to ship goods, rescue Italian citizens abroad and 13 international bio-containment missions. The Joint Operations Headquarters created a living document with observations and best practices collected from National Armed Forces, NATO and EU Lessons Learned on IT tools and Infrastructures, hospital capabilities and deployment readiness. The goal is to improve future operational planning capabilities.

The Portuguese Perspective

Colonel Luis Viana from the Lessons Learned Centre of the Portuguese Joint Operations Command, explained how Portugal's armed forces supported the National Civil Protection and Emergency Authority and the National Health Service with beds, tents, hospital support, and disinfection of facilities. In addition, Military teams were responsible for running call centres and tracing and tracking potential COVID-19 contacts, providing education in schools and elderly care homes on how to wear masks and maintain social distance and other safety precautions. The flow of Lessons Learned from all the activities has been constant, and in full accordance with NATO doctrine: one of the first Lessons identified was the need for remote teleworking solutions such as Video Tele Conference and Virtual Private Network soft and hardware.



The British Perspective

Lieutenant Colonel Christopher Somers from the S01 Defense Learning in Joint Warfare at the UK Strategic Command focussed first on the thousands of COVID-19 related observations gathered between January and May 2020, which were analysed mostly at the Tactical level, but also Operational and Strategic. LTC Somers also spoke about the importance of joint and Interagency cooperation across Military Liaison Officers and described the adaptation that UK Defence had to sustain in terms of digital literacy and tools, Information and Knowledge Management. From the operational perspective, the pandemic required the aid of reservists, which were invaluable to the UK's efforts to combat COVID-19. In addition, the HQ responsible for Homeland crises expanded its numbers from 23 to 282 to meet the increased needs and worked closely with Departments and organizations. Finally, he spoke about the NATO Lessons Learned Process which has been recently introduced there, commenting on its agility as a process.



The Partner Perspective



Learning from others is an efficient and effective way to learn. Finding out how someone else “solved the problem” can provide new insights into the way we do things. At the NLLC21, NATO Partners were invited to explain how they have been learning the COVID-19 pandemic Lessons.

Lessons Learned from Sweden



Ms Caroline Trulsson, Branch Head J7 Lessons Learned of the Swedish Armed Forces

“...compared to other operations aimed at assisting the civil society in emergencies like the wildfires of 2018, the duration of support provided during the COVID-19 pandemic led to several challenges and consequently to lessons learned.”

Ms Caroline Trulsson, Branch Head J7 Lessons Learned of the Swedish Armed Forces, opened the panel with a description of how her national Defence faced the pandemic side by side with government agencies and municipalities. Among other activities, they relocated COVID-19 patients via helicopter and ambulance transports, supported the Public Health Authority with national testing, and increased hospital capabilities by providing intensive care beds, hospital tents, sick beds, medical staff, protective masks, ventilators and other material divided among regions by the National Board of Health and Welfare.

Ms Trulsson noted that, compared to other operations aimed at assisting civil society in emergencies—like the wildfires of 2018—the duration of support provided during the COVID-19 pandemic led to several challenges and consequently to lessons learned. To name a few: improved efficiency in communication among HQ command functions to avoid duplication of work and fortified defence capabilities during long emergencies. She noted that where LL analysis usually takes place after a crisis, exercise, or operation, the COVID-19 pandemic pushed Swedish Armed Forces to publish an initial LL document during the pandemic that was and still is a living document under the guidance of the highest level of command and Internal Audit control.

Lessons Learned from Ireland

Lieutenant Colonel Robert Kiely, from the Evaluation and Lessons Learned Section of the Irish Defence Forces



Lieutenant Colonel Robert Kiely, from the Evaluation and Lessons Learned Section of the Irish Defence Forces presented the Irish perspective on the development of a Lessons Learned Culture during COVID-19. After a brief introduction in Gaelic in honour of St. Patrick's Day, LTC Kiely described the challenges of developing a Lessons Learned Culture and gaining buy-in from the wider Defence Organizations. The pandemic accelerated the ability to acquire lessons thanks to a shift in the attitude of senior management, giving greater importance to Lessons.

“We should not let our fear of failure jeopardize our ability to innovate”

Operation Fortitude, the Irish COVID-19 operation, included movement and delivery of personnel and vaccines, Military Doctors, nurses, paramedics, supported the Health Service, testing centres, contact tracing and facilities disinfections. None of which were “standard” activities for the forces. Noting that, the Irish population is used to seeing the military out on the streets of Ireland because of the country's history, and troops are quite comfortable in working in a joint or interagency environment.

LTC Kiely also noted that, as with many other nations, the COVID-19 pandemic offered some opportunities as well as challenges: increased contact with the JALLC in the decision-making process, the Irish Lessons Learned portal received very positive feedback from users due to the Lessons applicability at tactical to operational level. Finally, LTC Kiely noted that although the importance of Lessons Learned is clear to most, there is still a reluctance to admit mistakes were made and that there is a need to move away from a *blame culture* towards a *just culture* where mistakes are accepted as part of the learning and innovation process. We should not let out fear of failure jeopardize our ability to innovate.



Lessons Learned from the EU Military Staff

Colonel Branko Ticac, from the Concept and Capability Directorate of the European Union Military Staff

Colonel Branko Ticac, from the Concept and Capability Directorate of the European Union Military Staff (EUMS) took the opportunity to explain to the NLLC21 audience how the EUMS does Lessons Learned. He explained the EU's legal basis for Lessons Process and how the EUMS analyses every observation from member and third-party states, operations, and missions but considers only lessons at the Political and Strategic Level.

The first phase of the Lessons Process, is the collection of observations from actors associated with Common Security Defence Policy activities. These observations are then analysed in the second phase at Directorate, Division, or Branch level. In phase 3, plans are developed to take actions while

in phase 4, Outputs, the Lesson Identified becomes a Lesson learned. The EU has two different Lessons databases: the Lessons Management Application is only military, whereas the Platform for Crisis Response efforts is for both civilians and military.

COL Ticac went on to explain that the Political and Security Committee tasked the EU External Action Service (EEAS) to investigate COVID-19 pandemic lessons, which led to the exposure of some shortfalls including the need for better EU coordination in military-civilian project decision-making, issues relating to sharing classified information, and the need for better international strategies and coordinated actions.

DELIVERING

LL During COVID 19

Presented by Ms Katie Mauldin, SORA, JALLC

RADM Guy Robinson

DCOM STRIKFORNATO

COL Rupert Alers-Hankey

Future Plans and Requirements
Branch Head, SHAPE

COL Juan Molina

LL Management Division Head,
JALLC

It comes as no surprise that NLLC21 dedicated time to learning about how we learned lessons from the COVID-19 pandemic. In a panel that saw representatives from both NATO's Strategic Commands and the NATO Force Structure, the various ways in which Lessons activities and deliverables were adapted were presented and discussed. The key take away? That we need to learn from this experience and keep those changes that will benefit the Alliance after the pandemic: to never let a good crisis go to waste.

Speaking from the JALLC's studio in Lisbon, RADM Guy Robinson, Deputy Commander of Naval Striking and Support Group NATO (STRIKFORNATO) opened the panel talking about how the COVID-19 pandemic really forced a more operational mindset on his command when it came to identifying and learning lessons; it was no longer optional, it was no longer an after-thought, he commented. Referring to some of the traditional challenges relating to Lessons Learned and recent innovations in Lessons Learned deliverables at the JALLC, he said that the Lessons Learned Community is moving in the right direction to make it more attractive to all involved. RADM Robinson also highlighted some of the changes to exercise planning that were necessary because of COVID-19 pandemic measures, but that have potential for longer lasting benefits for the Alliance, such as holding exercise planning events and VIP days remotely which actually increased efficiency and attendance. He finished with a call to the Alliance to not revert back to the pre-COVID standards but to maintain best practices and lessons learned from COVID-19 pandemic that have benefitted the Alliance.

COL Rupert Alers-Hankey, Future Plans and Requirements Branch Head at SHAPE, addressed the audience from SHAPE's remote facilities just outside Mons, Belgium. He explained how SHAPE had developed a COVID-19 Battle Rhythm that ensured decisions were taken based on lessons and experience from the COVID-19 pandemic and

“COVID-19 has presented a real opportunity to bring Lessons to life and move beyond the dreaded Lessons spreadsheet...”



JALLC Studio



COL Rupert Alers-Hankey



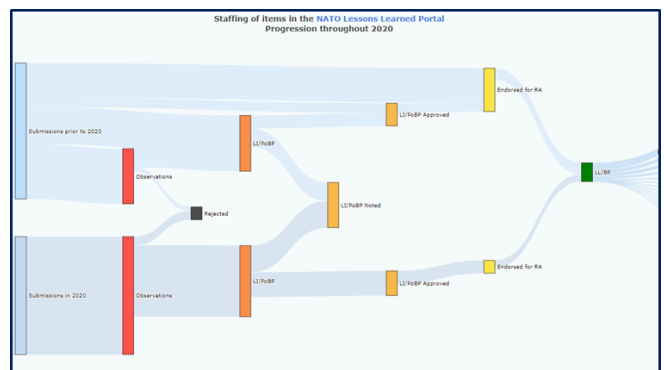
how Lessons Learned forms a key part of SHAPE’s Exercise and Operations related activities. From Lessons Learned Annexes in Exercise planning documentation to reporting lessons from Resolute Support Mission and other operations, Lessons Learned is firmly embedded as a key element. COL Alers-Hankey went on to explain to the audience that SHAPE has not only captured COVID-19 lessons during the pandemic, but has actively ensured that this valuable learning has found its way into the current plan for the second wave of COVID-19 and into the documentation for future responses to pandemics, commenting that the organization really was caught “on the back foot” by this pandemic and we need to be ready for the next one.

COL Juan Molina, the Lessons Learned Management Division Head at the JALLC, finished the series of presentations with a comprehensive overview of the JALLC’s adaptation to the COVID-19 pandemic. He highlighted the three key areas where the JALLC had contributed to NATO’s efforts: NATO Lessons Learned Portal (NLLP) Management, NLLP Active Content Management (which includes periodic reporting, short term analysis reports, and data visualization such as the graphics on this page), and Lessons Learned training, as well as the JALLC’s continued support to exercises throughout the pandemic.

Referring to analysis of COVID-19 related NLLP items, he presented the six key areas where NATO is learning lessons from COVID-19: Business Continuity, Situational Awareness; Preparedness; Anticipation; Resilience, and Communication. He also referred to the JALLC’s short term analysis report on Strategic Military Lessons of the COVID-19 crisis and highlighted the seven Lessons Identified in that

report. Finally COL Molina turned to the JALLC’s Lessons Learned training capability noting that around 90% of all outreach and training events were cancelled or postponed in the last year due to the COVID-19 pandemic. The JALLC’s Advisory and Training Team (JATT) adapted their training packages to be able to deliver training online, but this meant sacrificing key elements of the teaching/learning experience such as syndicate work, white board work, and face to face interaction.

The Panellists then joined Ms Katie Mauldin, one of the JALLC’s two Senior Operational Research Analysts for an open discussion on the adaptation of Lessons Learned Deliverables.





Hosted by the:

INNOVATION HUB

INNOVATING

THE NATO LESSONS LEARNED CAPABILITY

Hosted by Allied Command Transformation's Innovation Hub in Norfolk, Virginia, the panel on Innovating the NATO Lessons Learned Capability covered a wide variety of topics and presented some (not too distant) futuristic solutions to problems encountered during the COVID-19 pandemic. "Beam me up Scotty" and other Sci-Fi references may not be too far from our reality as the panel members explain.

BGEN Dieter Kohl

Special Advisor and Innovation
Champion HQ SACT

Mr Paul Thurkettle

Modeling & Simulation Training
Technologies Branch HQ SACT

Dr. Arnau Pons

Analysis of Alternatives Branch,
HQ SACT

Mr Stefan Olaru

Research Analyst, JALLC

Presented by: LTC Alfred Rosales

Head of ACT's Innovation Hub

BGEN Dieter Kohl, Special Advisor and innovation Champion at HQ SACT, set the scene for the panel by asking what the emerging crisis in 2020 meant for HQ SACT. The first realization was the lack of awareness of anything to do with pandemics: social distancing; mask-wearing, etc. and that most of the expertise on pandemics resided outside of NATO and outside of the military world. Open Innovation offers the Alliance the opportunity to harness external knowledge and expertise and effectively crowd source the Alliance's innovation information needs. By reaching out we can increase our situational

awareness and bring in resources needed to improve NATO. In this context, we can also improve (accelerate and automate) decision-making.

BGEN Kohl also highlighted the importance of using Artificial Intelligence (AI) and the exploitation of data. Natural Language Exploitation, though in its infancy, is one innovative way of exploiting available data to improve situational awareness and thereby the decision-making process. Finally, he touched upon the need to grasp the opportunity COVID-19 has offered us to improve our remote training and lower resistance to this method of learning. Much has been done and should be continued even after the current crisis is over.

Mr. Paul Thurkettle, from HQ SACT's Modeling & Simulation Training Branch, spoke next about innovation in education and training in NATO. He noted that although there has not been much evolution in the way education and training has been delivered for a long time, the last ten years have seen a shift in thinking about ways to teach and what does and doesn't work in a modern-technology based society. The COVID-19 pandemic has kicked this thinking into a higher gear and forced the NATO learning community to go online. Showing a video that highlighted the online pre-deployment training developed during COVID-19, Mr. Thurkettle showed how NATO is advancing virtual teaching techniques and materials. However, despite these successful developments, feedback has been that people miss the human aspect of teaching and learning; the need for face to face interaction.

In response to this, new and innovative ideas are being explored at HQ SACT; one includes the Holopod: a virtual live speaker that appears as a hologram on stage. Such solutions may provide a more human feel to future hybrid virtual/live events and/or to training sessions where not everyone can attend in person. Augmented reality and more virtual training are other potential solutions being investigated. Nevertheless, a change in mindset to education will be needed for NATO to really progress in this area. Going back to the "old ways" may be comfortable, but may not be right for the future.

Next, Dr. Arnau Pons of the Analysis of Alternatives Branch at HQ SACT spoke about AI FELIX (Front End Learning Information Execution) and leveraging AI for Information Management in the context of Lessons Learned. AI FELIX processes HQ SACT's incoming mail every day, extracting metadata, turning it into information and sending it on

to where it needs to go in the HQ. Using machine learning to extract keywords, and add context, meaning and insight to those words, AI FELIX can also determine when specific documents need to be attached to the information, greatly increasing efficiency and effectiveness of the process.

For example, AI FELIX learned by itself that COVID-19 was a keyword and began processing incoming mail accordingly. AI FELIX was developed to assist HQ SACT deal with the daily flood of information and is learning all the time. As a result it's getting quicker and more efficient, freeing up time for humans to do tasks only humans can do. Although AI FELIX is still a prototype, there are plans to make it a capability. Highlighting some of the Lessons Learned from the AI FELIX project, Dr. Pons mentioned the need to remain engaged with users during development, and understanding that failure is an option and part of the innovation process. He closed by saying that AI can and should be used in the Lessons Learned process.

Finally, the JALLC's own Mr. Stefan Olaru presented New Technologies in support of Lessons Learned to the audience, providing an update of the status since the last NATO Lessons Learned Conference and an overview of future plans. The JALLC has been working hard to capture user requirements for the new NATO Lessons Learned Toolset. Over 250 user requirements have now been captured and coordinated and will be incorporated into the next phase of capability development. It is important to recognize that the evolution from NATO Lessons Learned Portal (NLLP) to the New Lessons Learned Toolset will take the time it takes and will involve maintaining the relevant parts from the NLLP while developing relevant NATO-wide, rather than local, data incorporation and features. The whole project will require a true innovation mindset and needs to be planned with the whole NATO Lessons Learned Community and not be based on short-term, quick-win, reactive solutions. As such, the New Lessons Learned Toolset will also be subject to spiral improvement rather than local updates, further ensuring that this new tool truly has NATO-wide applicability and usability appropriate for a 21st century organization.

**“In times of change,
learners inherit the
earth, while the
learned find them-
selves beautifully
equipped to deal
with a world that no
longer exists.”**



Day 3 of the event was dedicated to the NLLC21 Audience really getting to grips with the central theme of the conference as participants broke out into four breakout sessions aimed at capturing the Big Rocks on each topic from the Lessons Learned Community.

Participants left the Attendify platform to join colleagues and facilitators on dedicated session platforms where everyone could contribute and interact.

Here we summarize some of the key points.

NLLC21 BREAKOUT SESSIONS

Standardization in Lessons Learned

The Standardization in Lessons Learned Session highlighted three presentations, which discussed topics on Lessons Learned interoperability, new ways to execute and tools to use in the standardization process, and the need to focus on quality over quantity when standardizing. An important concluding thought was that many participants agreed there is a need to make Lessons Learned information sharing between Nations and NATO easier, but that we as an organization must be careful not to demand things of Member and Partner Nations. The session had over 80 participants, and the outcomes and important ideas generated in this session will move forward into the NATO Lessons Learned Network in the standardization process.

Improvement and Innovation in Lessons Learned

The Improvement and Innovation in Lessons Learned Session included a wide variety of presentation topics, including: the JALLC Advisory and Training Team activity adjustments over the past year; the pandemic's impact on the training programme at the NATO Human Intelligence Centre of Excellence; the use of visuals in reporting Lessons Learned; the use of Artificial Intelligence in conducting interviews and processing interview data; and finally, a presentation on using ontologies in improving the Lessons Learned process and data comprehension. The session reached a peak of 85 participants and the findings from this session will be taken forward into the overall innovation plans for the NATO Lessons Learned Capability.



NLLC21
Lessons Learned in a Global Crisis

Lessons Learned in a Global Crisis: what did we learn and how can we do better?

Collection and Exploitation of Lessons Learned in Exercises

The session on Collection and Exploitation of Lessons Learned in Exercises attracted over 100 participants highlighting just how important the topic of Lessons Learned in Exercises is to NATO staff. After a fruitful discussion that integrated the topics covered in both the Standardization Session and the Improvement and Innovation Session, the facilitators isolated three important efforts to focus on moving forward. These efforts involve improving components within the Lessons Learned exercise process, adjusting the Lessons Learned training of exercise personnel, and standardizing the understanding of successful observations.

Future Leaders' Perspectives

The session on Future Leaders' Perspectives welcomed the next generation of potential leaders to present on what they believe are critical topics within the Lessons Learned Community and their ideas on ways ahead. The facilitators noted that given the organizational focus on NATO 2030, it is critical to engage younger professionals as they will be the primary Lessons Learned leadership by that time. In this session, presentations from this next generation included topics such as online training, new technology for improved military police patrol deployments, the challenges with implementing Artificial Intelligence solutions, and how the Alliance should respond to climate change. All the presentations led to rich discussions on how the NATO Lessons Learned Capability can take advantage of the potential solutions to each of these challenges.

Behind the scenes...

NLLC21

The fall-out from NLLC21 has been a Lesson all in itself; not only was the content greatly appreciated, but the NLLC21 Team have received many questions about how the event was organized. In this article we catch up with the team after a (well-deserved) break from organizing the event to find out how they did it.

First things first, let's introduce the JALLC staff members who formed the core NLLC21 Team. Stefan Olaru, JALLC research analyst was the Officer of Primary Responsibility (OPR) acting under the supervision of Colonel Juan Molina, the head of the JALLC's Lessons Learned Management Division and the conference director. Stefan was supported by Ignacio Fonseca, also a JALLC research analyst; Jodie Lazell, the JALLC's editor, and intern Naina Azimov who was interning during the whole planning and execution period and so got some real hands-on experience in executing NATO events.

The core NLLC21 Team was supported by other members of staff from all of the JALLC's functional support areas and from both of the JALLC's divisions in providing content, speakers, and moderators. In short, this was a whole of JALLC effort, and with a peacetime establishment of just 50, the NLLC almost always touches all the staff in some way shape or form every time we organize it. "It's just not possible to organize an event of this calibre without the support of everyone in the JALLC; some play a bigger role than others of course, but everyone gets involved," commented COL Juan Molina, conference director.

Almost immediately after the final "credits" rolled on NLLC21, the team started to receive emails congratulating the JALLC on a great event and... wanting to know how we did it. Everything from the application selected, to studio set-up and engaging with the speakers. So in this feature article, we asked the team to answer some of the FAQs from the feedback we received on the event.

When did you start planning the NLLC21?

"Planning always starts too late, even when we start early," laughs Stefan when faced with this question. After six years of being involved in organizing Lessons Learned events, he's got some experience at this now. "Seriously though, we start planning almost as soon as the last NLLC event ends. As we are a small organization we don't have the luxury of having a lot of staff to organize the event. That means with only a small team to get the job done, we need to take advantage of a long run-up. That usually means early-booking event venues and talking to speakers about availability and flights where possible. This year was obviously different as we had to hold a virtual event. That made things easier and yet more complicated at the same time. Easier because there were less moving pieces than usual. More complicated because the main moving piece, the event platform, was completely uncharted territory for the JALLC. We received the final direction and guidance for the event in November which, together with COVID-19 restrictions made getting the event organized by the March start date, a challenge. But the whole JALLC pulled together as a team and we succeeded"





Studio 1 and Studio 2 were set up in the JALLC's Meeting Room using multi-purpose props and furnishings the JALLC already owned creating zero additional costs to the NLLC21

Why did you select the Attendify App as the NLLC21 platform?

Ignacio smiled at this question as it's one the team have received a lot post-event. "After a lot of discussion among the NLLC21 Team and the JALLC staff about our own experiences with online conferences and seminars along with what we knew we wanted for the NLLC21, we narrowed the available platforms down to two or three, with Attendify ultimately coming out on top because of the added features it offers. We really wanted participants and speakers to have the same level of interaction and networking possibilities as the "real" NLLC and Attendify gave us the options to provide that."

Stefan joined in saying: "One of the more practical findings from organizing this event is that, as there is no NATO-wide or Enterprise solution for a conference platform yet, we have to find the best solution for each event. In some ways that is great as it means we have the freedom to tailor the event platform and are not restricted by a standard one-size-fits-all model. But the downside is, as RADM Robinson put it, this app was yet another in a series of apps that people have had to master over the past year; another opportunity for someone to not know how to mute their microphone or switch on their camera. All in all, the Attendify app has been great for this conference. It certainly comes with its own set of benefits and limitations as I'm sure they all do. We will be happy to share all our lessons and best practices with those involved in developing NATO's own conference platform."



How did you attract such high-calibre speakers to the NLLC?

marketing and communications of the event, but mostly thanks to Lessons Learned taking a better hold in ACT and more widely in NATO. The JALLC has really been pushing the Lessons Learned message since 2018 when we reorganized the HQ under the orders of SACT into a more Lessons Learned leaning centre. This has led to increased awareness and importance of Lessons Learned in NATO. In turn, this has meant that the NLLC has evolved into a truly key event for, not only the NATO Lessons Learned Community, but really everyone who is involved in improving the Alliance: from the highest political level to the boots on the ground; Lessons Learned make a difference. The NLLC Team has been able to leverage this increased interest in Lessons Learned to draw high-quality, high-level speakers to the event who have a real message for the NATO Lessons Learned Community and who want us to do well because if we, the NATO Lessons Learned Community, do well, then NATO does well. At the last NLLC, participants noted in the feedback that they felt there was a lack of leadership engagement. I think that this NLLC has shown that the mindset to Lessons Learned at the leadership level is changing and that our leaders want to engage."

Stefan, as the OPR for the event, is responsible for the agenda and the content. "I think that the NLLC has been growing in importance and in visibility over the past years. That's partly thanks to better



How did you select the theme for the NLLC21?

Stefan again answers this one. “Actually not many people realize that the NLLC is a SACT event; the JALLC just hosts and organizes it on behalf of SACT. That means that the key elements of the event are decided and driven by SACT and his agenda. Each NLLC theme is given to us by SACT and reflects what he wants to get out the NATO Lessons Learned Community during this opportunity to get everyone together and share ideas, experiences, lessons, and best practices. The theme is usually either based on something that is very current on SACT’s agenda or is more forward leaning and looks to inform future plans.”

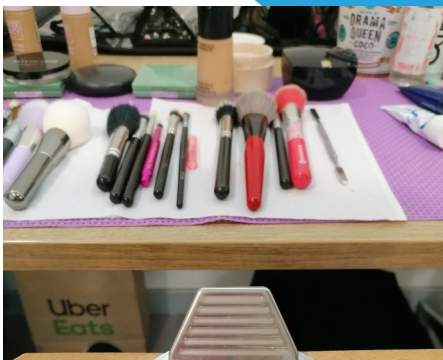
How did you get the polished TV show look and feel that characterized the NLLC21?



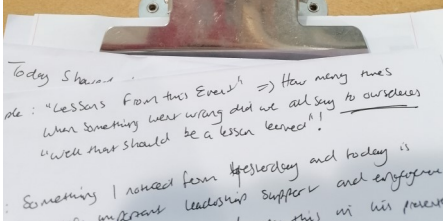
The JALLC’s editor, Jodie Lazell, who is responsible for NLLC communications and marketing answers this one. “As soon as we knew we were going to hold the NLLC online in 2021, I knew I wanted it to be “comfortable viewing” and not a “glorified VTC.” I wanted the JALLC to “present” the NLLC like we do on stage and not just have people sitting at that desks with their laptop webcams on. I wanted people to have the same special feeling they have when they attend an event; that they are guests and taken care of.



By the time we started planning the NLLC21, I think the whole team had already experienced lots of different styles, platforms, and organizational set ups. It was more a case of knowing what we didn’t want at that stage. I don’t think I ever doubted for a second that we would not engage an external film production team (Moonway Films in this case) to help us out. They’ve been working with us for a few years, helping to create a more polished and professional look and feel to our informational videos on Lessons Learned with great success. I knew that they would need to be involved to make the difference.



Then it was “just” a case of taking the platform and the agenda, and basically writing a full playbook or script as you would for any TV show or stage production: a minute by minute breakdown of who needed to be where, when, doing what. I designed two studio stages using marketing materials we already had (so keeping the cost to a minimum), and we transformed the JALLC’s meeting room into a full TV Studio and production HQ for a week. It was a lot of work, but great fun, and well worth it in terms of the result. We’ve had so much great feedback on the viewing experience.”



Some pictures from behind the scenes at NLLC: Top Jodie and the Film Crew run through the NLLC21 Playbook the day before the NLLC21. Middle: Naina Azimov, JALLC Editor’s Intern, mans the switchboard controlling what viewers see in the JALLC Studio. Bottom: work never stops as notes are run through while in make-up ready for the next session.

What lessons did you learn from organizing and hosting the NLLC21?

“Every NLLC we organize and host we learn lessons and we get better,” answers Stefan with Jodie concurring. “This event was obviously different and so we had a different experience to learn from.” Jodie agrees saying, “I think that the big lesson I learned is that, despite our size, we can put on an online event of this standard and put it on well. We really had to be clever and efficient about every aspect of organizing and executing the event. With limited resources (human and financial) it forces you to think outside the box and re-evaluate every decision you’re going to take to make sure it is the best possible one and then still ask yourself: can we do it better, cheaper, faster? For example, we didn’t really have any budget for the stage dressing, so we used multi-purpose communications props we already have and just general furniture from around the JALLC to create the studios in the Meeting Room at zero extra cost. A little creativity goes a long way.” Jodie has had some experience in TV and stage production which has come in handy in the past and very much so during the NLLC21. “I thoroughly enjoyed using skills I hadn’t for a long time and it just goes to show, you never know what experience you’ll need to draw on during your life.

Everything we did at this event can be carried forward to pretty much any other online event we need to organize scaled up or down as needed. That’s great to know as we think that we will be doing more online/hybrid events in the future.”

“Another interesting observation” notes Stefan, “is that we had more attendees than ever before from a much broader audience, both in terms of entity and geography. That is clearly because the virtual nature of the event made it much more accessible: we weren’t limited to a set number of participants; no one had to travel so no problems with agendas; the cost for participants was zero to attend; and perhaps many more factors that we still need to identify.” In terms of real Lessons Stefan notes, “Of course there are lots of things I would do differently this time. We faced plenty of challenges: from developing the agenda, to effectively addressing the NLLC objectives in virtual format, and working the challenge of the NATO security framework on a commercial conference platform. Not all are going to be carried forward, but the main thing is that we are busy capturing them all now so they can be shared for future



The NLLC21 Logo

A picture is worth 1000 words

We've all been to so many of these events, they are all different in their own ways, but they have one thing in common: they all have their own branding and logo. You probably don't realize it, but a lot of thought and creativity goes into this aspect of an event and the NLLC21 is no exception. We take time to create a visual that meets the conference needs and will speak to the audience. To find out more about the process, we spoke to the JALLC's editor and Sofia Franchi, the creative graphic designer responsible for the NLLC Logo.



A logo doesn't just happen. It needs to be: Simple, Relevant, Memorable, Timeless, and Versatile. That's a tall order and requires expertise, experience, and skill. The JALLC's editor is responsible for the JALLC's internal and external communications and so the design of the NLLC21 logo and branding fell to her. "I know when to call in the experts." Jodie, the JALLC's editor begins, "For an event of this importance to the JALLC, there is only so far my skills and software can stretch. So at times like these, we like to call in the graphic design "cavalry" and for this event it came in the form of local young professional Sofia Franchi."

It was Sofia's first time working for the JALLC and after receiving the brief on the event and the logo requirements she came up with some great first designs. The brief contained background information on the conference and its theme, as well as a list of key- or trigger-words. "As soon as I finished reading the brief," Sofia said, "ideas started popping into my head about what would be a good graphical representation of the ideas in the brief. The hard part was really to narrow all the ideas down into just a few, simple and relevant elements that would capture the spirit and content of the event."

"I really wanted to show the global nature of the event and the pandemic. That's represented by the circular shape of the logo. But I left the circle open to represent that this event is about being open to ideas and solutions and to open our mindset to how to live and work during a crisis like this COVID-19 pandemic and ultimately beat it." About the virus element she said, "I wanted the virus to be represented of course, but I didn't want it to be the main focus, the main focus is on capturing the ideas from the COVID-19 experience."

Working within the new NATO Brand Identity guidance that recently came out, Sofia said she did not feel limited by NATO's branding rules. "Every organization has visual identity and branding rules."

NATO's guidance and the brief from the JALLC gave me enough freedom to create a distinct and relevant logo for the event. I really enjoyed working with the JALLC. It's been a great opportunity and a lot of fun."



NLLC ONLINE

The first online edition of the NATO Lessons Learned Conference was a great success, in part due the technology chosen to host it. The NLLC has always been an important part of the NATO Lessons Learned calendar and NLLC21 would need to adapt to COVID-19 life as much as every other aspect of our lives has had to do. Despite being an online event, NLLC21 still managed to give participants from the NATO Lessons Learned Community and beyond the opportunity to get together and share lessons from their experience of the pandemic.

The Attendify Platform was chosen from a wide range of commercially available solutions as there is no NATO-wide conference platform available yet. Some of the key reasons why the Attendify App was chosen include the many features that allow participants to inform themselves and to interact with each other. Limitations included the maximum number of speakers in each sessions: five. The NLLC21 team had to keep all the benefits and limitations in mind while not only planning the execution of the event, but also the actual content, to ensure that the event as a whole would run smoothly and be a success.

Based on the feedback, we got it right. NLLC21 has been described as: “the best Virtual activity I’ve attended all COVID, what we got was polished, professional, and enormously useful to a large body of professionals.” Other comments include: “Great job and successful conference! It was truly well structured and professional organized!” as well as: “Excellent work! You all have my deepest admiration for pulling this one off! Capture the Lessons!” and also “superb and inspiring, beneficial and innovative.”

Will the NLLC remain online? It is safe to say that we are learning the lessons from this event and it seems that the online aspect has been greatly appreciated. Watch this space to find out what the next iteration of the NLLC will look like.

Attendify

NLLC21 Agenda



Tuesday 16 March

- 12:30 | Connection Check
- 12:40 | NLLC Introduction: Mr. Stefan Olaru, JALLC Research Analyst
- 12:55 | Welcome to NLLC21: JALLC Commander BGEN Bogdan Cernat
- 13:05 | Opening Remarks: Supreme Allied Commander Transformation André Lanata
- 13:30 | Keynote Address: NATO Deputy Secretary General Amb. Mircea Geoana
- 13:55 | Highlights of NASA learning during the COVID-19 crisis: Dr. James D. “JD” Polk, NASA Chief Health and Medical Officer
- 14:15 | Key take-aways from NATO STO Technical Report *The Military Impacts of COVID-19 on the Alliance*: GEN (retd) Sverre Diesen, SAS-169 (rescheduled to 16:00)
- 14:30 | Break
- 14:40 | National Perspectives on LL Capability Adaptation During the COVID-19 Crisis
Spain: BGEN Francisco Javier Vidal Fernandez—ACOS OPS, ESP Operations Command
Italy: COL David Morpurgo—Head of International Relations Office, ITA Defense General Staff
Portugal: COL Luis Viana—Lessons Learned Center. PRT Joint Operations Command
Great Britain: LTC Christopher Somers—SO1 Defense Learning in Joint Warfare / UK Strategic Command (rescheduled to 17 March 16:20)
- 16:00 | Daily Wrap Up: Ms. Jodie Lazell—Editor, JALLC
- 16:15 | Next Day Preparation: Mr. Stefan Olaru—Research Analyst, JALLC

Wednesday 17 March

- 12:30 | Connection Check
- 12:40 | Introduction and Daily Overview: Mr. Stefan Olaru, JALLC Research Analyst
- 12:45 | Partner Perspectives on LL Capability Adaptation During the COVID-19 Crisis
Sweden: Ms. Caroline Trulsson—Branch Head J7 Lessons Learned, Swedish Armed Forces
Ireland: LTC Robert Kiely—Evaluation and Lessons Learned Section, Irish Defense Forces
European Union Military Staff: COL Branko Ticac—Concept and Capability Directorate, EUMS
- 13:45 | Break
- 13:55 | Panel: LL Deliverables During the COVID-19 Crisis
Moderator: Ms. Katie Mauldin—Senior Operational Research Analyst, JALLC
Key Speaker: RADM Guy Robinson—Deputy Commander, STRIKEFORNATO
Panellist: COL Rupert Alers-Hankey—Future Plans and Requirements Branch Head, SHAPE
Panellist: COL Juan Molina—Lessons Learned Management Division Head, JALLC

14:55 | Break

15:00 | Panel: Innovating in the LL Capability to Face Future Similar Crises

Moderator: LTC Alfred Rosales—Head of ACT's Innovation Hub, HQ SACT

Key Speaker: BGEN Dieter Kohl—Special Advisor and Innovation Champion, HQ SACT

Panellist: Mr. Paul Thurkettle—Modeling & Simulation, Training Technologies Branch, HQ SACT

Panellist: Dr. Arnau Pons—Analysis of Alternatives Branch, HQ SACT

Panellist: Mr. Stefan Olaru—Research Analyst, JALLC

16:20 | Daily Wrap Up: Ms. Jodie Lazell—Editor, JALLC

16:35 | Next Day Preparation: Mr. Stefan Olaru—Research Analyst, JALLC

Thursday 18 March

11:45 | Connection check and Introduction

12:00 | Parallel Sessions:

Session 1: Standardization in LL

Session 2: Improvement and Innovation in LL

Session 3: Collection and Exploitation of LL in Exercises

Session 4: Future Leaders' Perspectives

14:15 | Introduction and Daily Overview: Mr. Stefan Olaru—Research Analyst, JALLC

14:30 | Morning Session Briefings from Session Leads and Facilitators

15:15 | NLLC21 take-aways and Closing Remarks: BGEN Bogdan Cernat, COM JALLC

15:30 | Next Steps: Mr. Stefan Olaru—Research Analyst, JALLC



Who Is Who?



Ambassador Mircea Geoană became NATO Deputy Secretary General in October 2019, after a distinguished domestic and international career. He is a strong advocate of transatlantic integration and has held a number of international positions, including OSCE Chairperson-in-Office in 2001 and personal representative of the OSCE Chairperson-in-Office for Georgia in 2005. Mr Geoană also served in various capacities as a diplomat and politician, including Ambassador to Washington, Minister of Foreign Affairs, President of the Romanian Senate, and, in 2009, his party's candidate to be President of Romania. He is also the founder of the Aspen Institute Romania and has published extensively on domestic and international affairs. Mr. Geoană is the first Deputy Secretary General from Romania, and the first from any of the countries that joined the Alliance after the end of the Cold War.

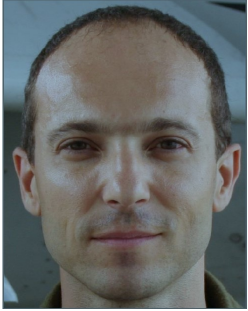
General André Lanata was confirmed by the North Atlantic Council as Supreme Allied Commander Transformation on 07 June 2018. He joined the French Air Force academy in 1981 and qualified as a fighter pilot in 1984. Throughout his career, he has acquired extensive experience, both as a fighter pilot and as an operational commander. As a staff officer, he served in both plans and policy, at air and joint levels. In 2000, he was assigned to the Plans-Programs division at FAF headquarters. In 2002, he joined the Joint Staff as the Operational Coherence officer in charge of the preparation of joint forces and force protection. Between 2004 and 2006, he was Commander of Air Force Base 188 and all French Air Forces in Djibouti. He joined the Air Staff in 2006 as deputy and then chief of Plans. From 2008 to 2011, he was assigned to the Secretariat for National Defence and Security as the deputy director for international and strategic affairs. In 2011, he became Deputy Chief of Operations at the Joint Staff. He worked particularly on the financing of French operations, bilateral and multilateral agreements such as the Combined Joint Expeditionary Force concept, and the transformation of the organization. From 2013, he was the chief of Plans at the Joint Staff, in charge of all military programs, financial planning, and arms control. In September 2015, he became Chief of Staff of the Air Force, which strengthened his relationships with Air Chiefs throughout the Alliance and among Partner nations. In this capacity, he implemented an ambitious transformation plan for the French Air Force.



Brigadier General Bogdan Cernat became JALLC Commander in June 2019. In June 2007, BGEN Cernat took his first staff assignment as chief of Future Logistics Ops in the Joint Logistics Command in Romania. He was then chief of the Protocol Office of the national Ministry of Defence. Between February 2009 and May 2014, he was assigned within the General Staff as Chief of the Military Police Division. In this role, he directly advised his Chief of Defence on the relevant aspects of homeland force employment, as well as employment in theatres of operations; policy development; and contribution to and implementation of relevant international standards. Later, within the national Military Police, he led the analysis in support of the capability development and training of the military police forces, which contributed to the implementation and improvement of these forces. BGEN Cernat also initiated and implemented the national Lessons Learned structure and process within his division and supported its wider implementation across the military police forces. In May 2014, BGEN Cernat was assigned as the commander of 30th Guards Brigade, assuring

development of human capital; high readiness combat status; and force protection for strategic military installations. He also had responsibility for military ceremonies, particularly those involving the Romanian President, and for the design, development, and implementation of Lessons Learned procedures. BGEN Cernat holds a Master's degree in national defence and security from the Romanian National Defence University and a bachelor's degree in marketing from the University of Economic Studies in Bucharest. He is a 2013 graduate of the US Army War College in Carlisle, Pennsylvania.

Speaker Biographies



COL David Morpungo was assigned to various posts in Italy or in Operations, including as “Black Cats Task Group” Commander in Herat (Afghanistan), as Italian Senior National Representative for operations in Iraq at the Combined Air Operations Centre (CAOC) in al-Udeid (Qatar) and the 51st Wing Commander in Istrana. From August 2019, he is the Head of the International Relations Office / Italian Defence General Staff. COL David Morpungo graduated from several courses including the Joint War College in Rome. During his career, he has received several national and NATO awards and decorations. COL Morpungo holds a Post-graduate Degree in Aeronautical Sciences and one in Political Science, and has achieved a Master in International Military Strategic Studies and a Master in Geopolitics economic globalization and international institutions.



Dr. JD Polk is the Chief Health and Medical Officer of the National Aeronautics and Space Administration (NASA) in Washington D.C. He is the former Dean of Medicine for Des Moines University’s College of Osteopathic Medicine. Prior to his work at Des Moines University, Dr. Polk was the Assistant Secretary (Acting) for Health Affairs and Chief Medical Officer of the US Department of Homeland Security (DHS), assuming this post after serving as the Principal Deputy Assistant Secretary for Health Affairs and Deputy Chief Medical Officer. Before working at DHS, Dr. Polk was the Chief of Space Medicine for NASA’s Johnson Space Center in Houston, Texas. He is the former State Emergency Medical Services Medical Director for the State of Ohio, and former Chief of Metro Life Flight in Cleveland, Ohio. Dr. Polk is a Fellow of the American College of Osteopathic Emergency Physicians, and a Fellow of the Aerospace Medicine Association.



Mr. Stefan Olaru is a research analyst at the NATO Joint Analysis and Lessons Learned Centre (JALLC). Before joining the JALLC in 2012, he served for fifteen years as an officer in the Romanian Army, mainly as instructor, researcher, and Lessons Learned analyst. His work includes over forty studies, projects, research papers, and publications in the fields of law, capability development, and international security. During his career, Mr Olaru has been involved in several NATO related activities, specifically within standardization and capability development framework. He also had short and long deployments in UN and NATO missions and operations in Kosovo, FYROM, Bosnia-Herzegovina, and Afghanistan. As a JALLC analyst, he has contributed to several analysis projects, Lessons Learned training activities and, more recently, to the efforts in identifying the way ahead for the implementation of the new technologies in support of Lessons Learned. For his service and duties, Mr. Olaru has received a variety of Romanian, UN, and NATO medals and awards. Mr. Olaru has a Master’s Degree in Private Law and a post-graduate diploma in management.



Mr. Cornelious (Ham) Doraton is the US Army NATO International Standardization and Interoperability Representative and functional expert for the Army in NATO Headquarters, Brussels. He represents, delegates, supports, and deliberates US Army policies, positions, interests, and initiatives to senior NATO and US officials. He develops, harmonizes, and observes implementation of Army multinational force interoperability policy in NATO standardization *fora*, by integrating two broad areas of knowledge and expertise: the policies, structure, and procedures of international military cooperation within the NATO and EU frameworks; and national security and national military strategies, policies, and programmes for technology, research and development, logistics, cooperative armaments, and tactical doctrine.



Ms Caroline Trulsson is branch head Lessons Learned and Analysis at Joint Forces Command J7 at the Swedish Armed Forces (SwAF) HQ. She holds a master in political science and philosophy. Of interest for both her bachelor and master has been military professionalism. First regarding Swedish and US military relations during the 1950-1960’s and later about military professionalism and professional autonomy regarding the Swedish mission as a part of ISAF in Afghanistan. She has been working with Lessons Learned for the past 6 years and has been responsible for developing methods regarding Lessons Learned in SwAF.

Speaker Biographies



LTC Robert Kiely was appointed as Officer in Charge of the Irish Defence Forces Evaluation & Lessons Learned Section last December following his return from overseas service with the United Nations. He has completed more than 33 years of service in a variety of leadership and staff appointments at Battalion, Brigade and Defence Forces HQ levels. LTC Kiely has completed nine tours of duty overseas including UNIFIL (Lebanon), Honduras, Afghanistan (ISAF) and MINURCAT (Chad). He also has considerable recent experience on the Golan Heights in Syria with the UN Disengagement Observer Force, as Chief Observer Group Golan with the UN Truce Supervision Organization. LTC Kiely holds degrees in Military Studies, Physics, Human Resource Management, Leadership, Management and Defence Studies and Higher education.



COL Branko Ticac, almost 30 years in military. During his career in the Croatian Armed Forces and the Ministry of Defense, he held different positions from platoon commander to advisor to the Minister of Defense for military issues. At the EU Military Staff/CONCAP Directorate/Exercise, Training & Analysis Branch, he is responsible for the management of the EU Military Lessons Process, its development, and procedures. He serves as a member of EUMS Crisis Planning / Mission Monitoring Teams and also as action officer/CJ7 Head within Military Planning and Conduct capability (MPCC) and oversee Exercise, Training, Analysis and LL activities of MPCC. Vice president of the Croatian Alumni George C. Marshall European Center for Security Studies (GCMC).



RADM Guy Robinson served during the combat phase of the 2nd Gulf War, he operated from the Iraqi Khawr al Amaya Oil Terminal and commanded the counter-terrorism task force operating in the Indian Ocean. During assignments ashore, Rear Admiral Robinson has served in the UK's Ministry of Defence as the programmer for the Directorate of Equipment Capability and on the staff of Flag Officer Sea Training staff as Commander Sea Training where he was responsible for the training of all Royal Naval major warships, from frigates to aircraft carriers, as well as a multitude of ships from both NATO and non-NATO navies. As a captain he served in the Ministry of Defence's Development, Concepts & Doctrine Centre (DCDC) where he was responsible for generating maritime concepts and high-level doctrine. His most recent shore assignment has been in Navy Command Headquarters as the Assistant Chief of Staff (Warfare).



COL Juan Molina has been Lessons Learned Management Division Head since August 2019 at JALLC. Among his several assignments throughout his military career, of note his assignment as Brigade Support Battalion Commander in Zaragoza (2009/12) and as 93th Field Artillery Regiment Commander in Tenerife (2014/16) as well as his assignments to NATO Joint Command South in Verona-IT (2002/04) and to SHAPE J7 in Mons-BE (2004/05). Additionally, he had temporary duty assignments to multinational operations in Croatia (1995), Bosnia (2008), Lebanon (2012) and Afghanistan (2013).



LTC Alfred Rosales is the Section Head for the Innovation Hub Laboratory, Headquarters Allied Command Transformation, Norfolk, Virginia. He is responsible for developing operational and strategic capability requirements on behalf of 30 NATO Nations. Lt Col Rosales was commissioned in 2001 through the Air Force Reserve Officer Training Corps. He was a 4-ship Flight Lead in the F-16CJ Fighting Falcon, a flight examiner in the T-6A Texan II, and a flight examiner in the MQ-9A Reaper, completing multiple combat deployments in support of Operation Iraqi Freedom and Operation Enduring Freedom. He is a senior pilot with more than 2,600 flight hours, over 200 combat hours, and 700 combat support hours. Prior to this assignment, he was the commander for the 6th Attack Squadron, Holloman AFB, New Mexico.

Speaker Biographies



Paul Thurkettle is a British NATO civilian working at one of the two NATO strategic commands, ACT based in Norfolk, Virginia. His tenure with NATO since 1990, and 12 years of Royal Air Force service, have covered telecommunications, command and control systems, technology, and training. Currently in his role as the lead for NATO in adopting technology for education and training, he is introducing e-learning into NATO, covering all aspects of this field from serious games to mobile learning (mlearning). Paul lives in Hampton, Virginia with his two children and boat collection.



Katie Mauldin has been a Senior Operational Research Analyst at JALLC since 2016, where she has been technical lead on over a dozen joint analysis projects and led analysis tasks for various NATO exercises and, more recently, COVID-related issues. Prior to NATO, she was a defense analyst with the US Government Accountability Office, investigating topics such as the F-35 Program and US forces planning in Afghanistan on behalf of Congress.



Major McCann is a United States Marine Corps Officer currently serving in NATO. He is a Low Altitude Air Defense Officer with a Weapons and Tactics Instructor designation that served in the Fleet Marine Force as a Battery Commander and at Marine Operational Test and Evaluation Squadron 1 as a Division Head. His command assignments include: Platoon Commander, 3d Low Altitude Air Defense Battalion, Officer-in-Charge, LAAD Unit Deployment Program, and Battery Commander, 3d Low Altitude Air Defense Battalion. Within the command billets listed he deployed in support of the Unit Deployment Program, Exercise EAGER LION, and in support of Operation INHERENT RESOLVE. His staff assignments include: Assistant Operations Officer, 3d LAAD Bn and Ground Based Air Defense Division Head, VMX-1.



Sarah Vincent-Major has a strong background in Operational Analysis at the UK Ministry of Defence's Defence Science and Technology Laboratory. She held posts in the Maritime Logistics team (Strategic and Operational analysis), the Logistics OA post at the Maritime Warfare Centre (Operational and Tactical analysis) and as the Theatre Maritime Sustainment Science Gateway during her time there. With a BSc in Mathematics and Computer Science, since joining DIEM Sarah used her experience to lead a number of AI projects that address problems that she witnessed through her work alongside the UK Military. The most mature of these is DUCHESS, an AI interview-bot which conducts anonymous, rich narrative interviews at a survey level scale. DUCHESS was awarded a 'Top 10' place at the Digital Leaders Innovation of the Year awards in 2020.



Brigadier General K. Dieter Kohl is the Innovation Champion and Special Advisor to SACT since October 2019. Prior to this position he was the Education, Training, Exercises, Evaluation Plans and Policy Branch Head at HQ SACT and Branch Chief Strategic Policies at NATO International Military Staff. Also, he served as Chief Executive Office at the European Union Military Staff and German Ministry of Defence. During his long career Brigadier General Dieter Kohl served in several posts within national and international frameworks, both on homeland and in operations. He graduated from various courses and was awarded several medals and merits.

Speaker Biographies



Lieutenant Colonel Christopher Somers was commissioned into the Cheshire Regiment in 2003. He then served as a light and mechanised role commander on multiple operations in Northern Ireland, Iraq and Afghanistan over the next ten years. Promoted to Major and attendance at the United Kingdom Staff College was followed by a joint appointment at the Permanent Joint HQ and armoured infantry company command with the Mercian Regiment. Following this, Lt Col Somers served as Major G5 Plans at the United Kingdom First Division and at the Army Personnel Centre. Promoted to OF4 in 2019 his first staff appointment is his current role as Lieutenant Colonel Defence Learning in Joint Warfare, part of the UK Strategic Command.



Magda Maszczyńska is currently working as a Senior Lecturer in Criminology at the Faculty of Arts, Humanities & Social Sciences at Marjon University in Plymouth. She studied Criminology with Criminal Justice Studies and International Relations as her undergraduate degree, Masters in Social Research on a postgraduate level followed by PhD in Criminology. She has examined structures and networks of transnational organised crime, more recently is working within fields of deterrence, terrorism and counter-terrorism, as well as aspects of investigative psychology and profiling. She worked also with UK Ministry of Defence and NATO and standardization became one of her top areas of interest. She is an active member of a variety of international societies, research groups and organisations.



Chiara Rylander joined the JALLC in March 2020 to take up the post of Senior Operational Research Analyst in the Lessons Learned Management Division. As part of the Data Analysis Team, her responsibilities include the delivery and quality assurance of NLLP Active Content Management (ACM) products. Prior to joining the JALLC, she completed an MSc in Operational Research at Lancaster University before starting her career as an Operational Analyst at the UK Defence Science and Technology Laboratory (Dstl). She later moved to BAE Systems CORDA, where she led analytical projects for Defence customers across the Land, Air and Maritime domains, as well as other Government departments and internal customers.



Jackie Eaton is the Principal Operational Research Analyst at NATO Joint Analysis and Lessons Learned Centre where she also began her NATO career as the Senior Operational Research Analyst in 2006. Between 2016 and 2018, she was the Science and Technology Advisor to the NATO Chief Scientist at NATO HQ, and has more than 15 years of NATO experience in a wide range of analysis in the context of defence, security and military operations and exercises. She has a passion for developing NATO's analysis capability and has taken various roles on the NATO Operational Research and Analysis Conference committee over the years. As the principal analyst at NATO's Joint Analysis and Lessons Learned Centre she is responsible for the centre's analysis programme development, analysis capability development and technical oversight of its analysis activities.



Lieutenant Colonel Francisco Javier Calero Perea has been Lessons Learned Section Head since August 2018 at SHAPE. Born in Sevilla in 1968, he joined the Spanish Army in 1989 and was promoted to first lieutenant in 1994 as an Cavalry officer of the XLIX Academia General Militar graduation. Later on, was promoted to Captain (1998), to Mayor (2005) and, lastly, to Lieutenant Colonel (2014). He graduated of the Joint Forces/Defence Staff College (2006/2007). Among his several assignments throughout his military career, of note his assignment as Cavalry Squadron chief of operations of the Legion Brigade in Ronda (Malaga) and Cavalry Squadron Commander of the Paratrooper Brigade in Valencia (2015/18). Additionally, he participated in multinational operations in Afghanistan (2005,2008) and EUTM MALI (2013).

Speaker Biographies



Inês Fonseca works as a Research Analyst at the NATO JALLC in the Data Analysis Team in the Lessons Learned Management Division. She has been focusing on the development and implementation of automated visual reports and animations to improve the quality of ACM products and facilitate consistent and faster monitoring of the NATO Lessons Learned Process. She worked as a Data and Public Policy Analyst in the Studies and Strategy Office of the Portuguese Foundation for Science and Technology; as a Researcher at the University of Lisbon, where she led a funded project on the application of machine learning algorithms for spatial modelling; and as a Research Assistant at King's College London, working in ecological modelling, where she also obtained a PhD degree in Environmental Modelling in 2005.



Lieutenant Colonel Scott Van Hoogen completed the Joint Combined Warfighter School, Air Command and Staff College, Squadron Officer School, Air and Space Basic Course as well as graduated in Organizational Leadership and Mechanical Engineering. Before joining the JALLC as Lessons Learned Management Division Staff Officer for Training and outreach activity, he served as Chief, Missile Warfare Analysis, Test Operations Officer, FAB-T Chief Software Engineer Team, Executive Officer, Chief, Link 16 Support and Structural Integrity Program Manager.



Major José Luís Mateus Feliz has been Lessons Learned Staff Officer since September 2020 at SHAPE. Born in Lisbon in 1965, he joined the Portuguese Air Force in 1985. Among his several assignments throughout his military career, of note his assignment as Lessons Learned Staff Officer and Lessons Learned Section Head in the Joint Command Operations of the Portuguese Armed Forces in Oeiras, from June 2015 to December 2018.



Colonel Rupert Alers-Hankey assumed his staff appointment in J7, after having served as the deputy Director Operations, Combined Joint task Force Operation Inherent Resolve. As Royal Scots Dragoon Guard Armoured officer, he had several operational assignments in Iraq, North East Nigeria, Afghanistan, Sudan, Kosovo, and Bosnia. His non-operational staff appointments include: Assistant Head Doctrine, Headquarters Field Army, Land Stabilisation and Counter-Insurgency Centre, Army HQ, Commander AFV CIS School, Armour Centre; Chief of Staff, British Peace Support Team East-Africa, Nairobi, Kenya, and a deployment in Germany. He holds master's degrees from Kings College, London and Cranfield University. He has been awarded the US, Defence Meritorious Service Medal.



General (ret) Sverre Diesen served as Norway's Chief of Defence after a number of command and staff positions, including Commanding Officer of His Majesty the King's Guards, Chief of Staff 6 Division and Assistant Chief of Staff for Strategy and Long Term Planning in Norway's Defence HQ. He is currently working as a research fellow at The Norwegian Defence Research Establishment (NDRE), Strategic Analysis and Joint Systems Division, and is engaged on a number of projects supporting Norwegian long term defence planning. He also has published two books on strategy and the future of the Norwegian armed forces, as well as chapters in a number of anthologies on strategy and security policy. He is a frequent contributor to professional journals as well as to the Norwegian media in general of articles on military and security affairs.

Speaker Biographies



Cadet Sergeant Ștefan-Cristian PETRE is a 3rd year student at “Nicolae Bălcescu” Land Forces Academy of Sibiu, military leadership specialty. He is currently living in Ploiești and he is 21 years old. His interests reside in Military Tactics and Weapons and was involved in the SECOSAFT conference as part of his university research programs. He is grateful for the opportunity to take part in the NATO LL Conference and shares view on the benefits and caveats associated with new technologies.



Cadet Sergeant Tudor COTTA, 3rd year student at “Nicolae Bălcescu” Land Forces Academy of Sibiu, currently living in Galați / Romania. He is 29 years old and interested in sports, hiking and computer games. He was involved in the NATO-funded project “The Anatomy of an Alliance” and he has published several articles at student conferences as part of his scientific research activities. He was looking forward to discussing and developing the new technologies topic at the NATO LL Conference.



Lieutenant SPORIȘ Darius is 30 years old and his current position is company commander in charge of 118 Land Forces Academy students. He is interested in topics such as the Leadership and Management of Military Organizations, and he has published one article about Military Capabilities as part of my Master’s programme scientific research activities, at the SECOSAFT students’ conference. He would also like to improve his knowledge about efficient leading at platoon and company level and in addressing issues that appear during training and missions, and his objective is to find pertinent solutions for them.



Lieutenant MIRIȚĂ Felicia is 27 years old and she graduated from “Nicolae Bălcescu” Land Forces Academy in 2016 and is currently working as a platoon commander at the LFA. Due to her interests in Military Leadership and Communication, she carried academic research and published one article about the Role of Communication in Performing Teams at the SECOSAFT students’ conference. She is eager to propose new perspectives to improve military actions regarding the recognition of the areas of interest and patrol, during the handing over of missions.



Cadet Corporal Vlad-Mihai ȚEȚU is a 2nd year military student at the Land Forces Academy in Sibiu. His current goal is to become a proud decorated soldier, the determination to pursue this goal came from his father, who was a well-respected military in this field of work. He is interested in taking part in as many projects as possible in order to further develop his capabilities and open new horizons in terms of opportunities. He is hopeful that with all that he has done up until this point and with what will come as an officer, he will have a significant role in making this world better by taking part in military campaigns and missions.



Cadet Corporal Alexandru FLOREA, 2nd year student at “Nicolae Bălcescu” Land Forces Academy of Sibiu. He joined the Academy to accomplish his goal of becoming the leader that every soldier would want to have as a commander through knowledge, empathy and flexibility. I look forward to the moments when I will have the time and resources for becoming a ranger, an airborne and maybe a military diver, but unfortunately the global pandemic makes things complicated. Another career goal is taking part in NATO’s international missions, such as NATO Resolute Support. I am definitely down to take risks, make sacrifices and work as hard as I possibly can for my career and for representing my country with pride.

Speaker Biographies



Dr. Arnau Pons is an Operations Research Analyst at NATO HQ SACT where he conducts Analysis of Alternatives for NATO Capability Development programmes. He is the AI FELIX technical lead managing the team of developers, as well as coordinating with ACT stakeholders and NCIA. He obtained his PhD in Aeronautics and Astronautics Engineering from Purdue University in West Lafayette, Indiana. Arnau holds a Master's Degree of Aerospace Propulsion Theory and Engineering by Beihang University in Beijing, China. Furthermore, he received his Aeronautical Engineering degree from the Polytechnic University of Catalonia in Terrassa, Spain.



Dr. Peter Winstanley is an Ontologist at Semantic Arts. He has a diverse background with experience in medical research, government, and standards development. He was a contributor to the W3C "Data on the Web Best Practices" recommendation and an editor of the W3C "Data Catalog" vocabulary recommendation. A former interoperability specialist with the UK Government Linked Data and Data Architects' Working Groups and the European Commission "Joinup" semantic technologies community, he is currently co-Chair of the W3C Dataset Exchange Working



Lieutenant-colonel Nuno Santos Loureiro, after 25 years as aircraft maintenance manager and five years as staff officer at Air Force Headquarters, is currently a military teacher in the areas of Communication, Leadership, Resources Management and Scientific Investigation Methodologies at the Post-Graduate Studies Department of the Military University Institute. Is an Integrated Researcher at the Research and Development Centre of IUM (CIDIU) and at the Interdisciplinary Centre of Social Sciences of NOVA Lisbon University (CICS.NOVA).



Lt.Col. Ausrius Buikus, attended the Military Academy of Lithuania, the Field Artillery Officer Course, Army Command and Staff Officer Course and Joint Command and General Staff Officer Course. He also possesses degrees in Human Resource Management and International Relations and Military Diplomacy. He served as Motorized Infantry Battalion, Platoon leader and Company Commander, as Field Artillery Battery Commander and Chief of S2 section, as Fire Support instructor at Army Command, Staff Officer Course and Fire Support Officer at Lithuanian Land Force Command, as Mechanized Brigade IRON WOLF, Field Artillery Battalion Commander and finally as JALLC, Lessons Learned Management Division Staff Officer for Training and out-



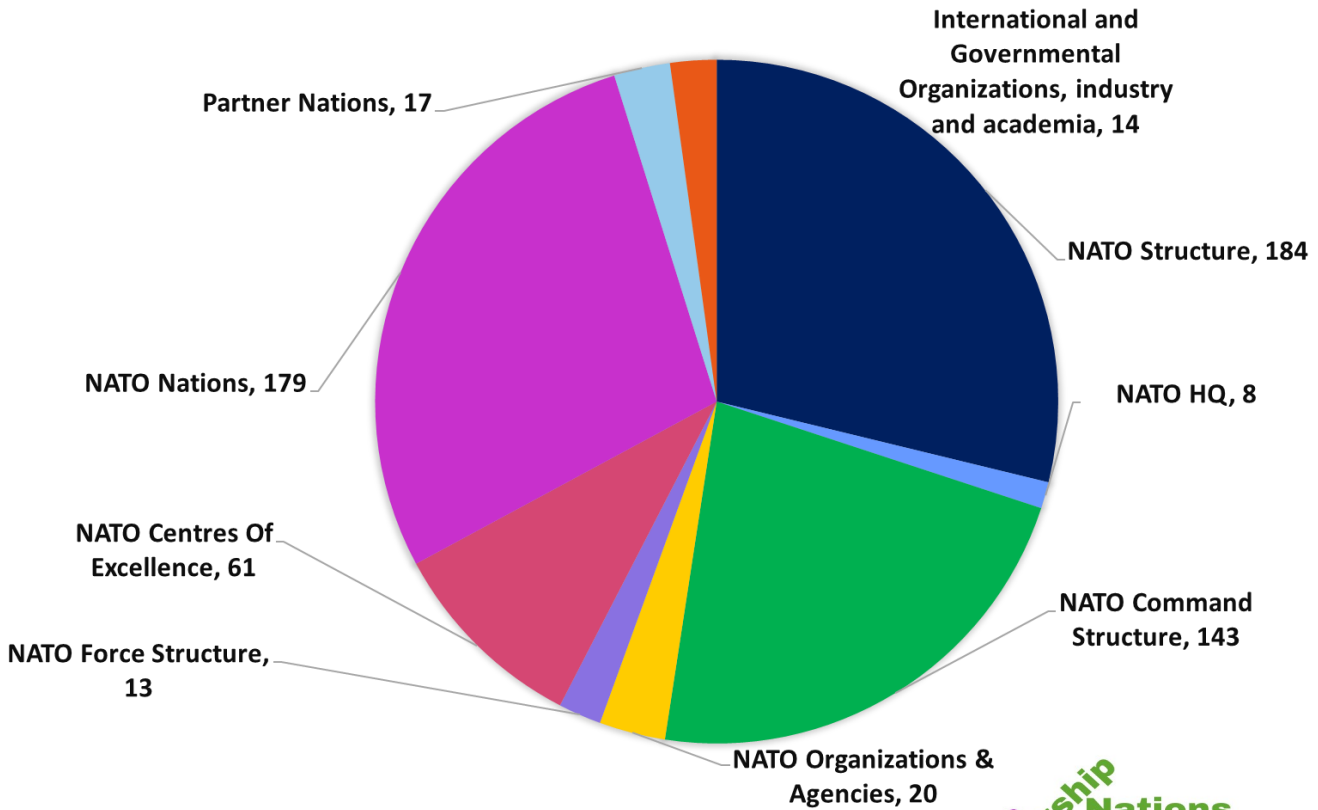
Colonel Luís Manuel Pimentão Viana works with the Joint Command for Military Operations. He served in communications centers, air operations centers, in the control of NATO documents, and in the instruction of recruits. During 13 years he headed a tactical communications unit, having provided CIS facilities to the commander of the Immediate (Joint) Reaction Force for 9 years. Within the scope of the same force, he participated in strategic and operational planning, with the aim of the force certification. He also performed functions of force planning, in the CIS division, in the Air Command Operational Staff (as A6) and as a unit Support Group Commander. He currently serves as the director of the Evaluation, Certification and Lessons Learned Center for the Portuguese armed forces.



Brigadier General Fco. Javier Vidal Fernández served as flight instructor in the Air Force Academy, F-18 pilot in the 15th Wing and in the 12th Wing, tactical instructor in the Tactical Leadership Program TLP. He worked as Chief of the Air Operations Section, in the Operations Division at the Air Force Staff; and as a Commander of the Talavera Air Base and 23th Wing. General Vidal has participated in several international missions: Bosnia, Kosovo, Chad, Libya and Afghanistan. In December 2020 he was appointed Deputy Chief of Staff Operations in the Joint Operations Command Spain.

NLLC21 @ a Glance

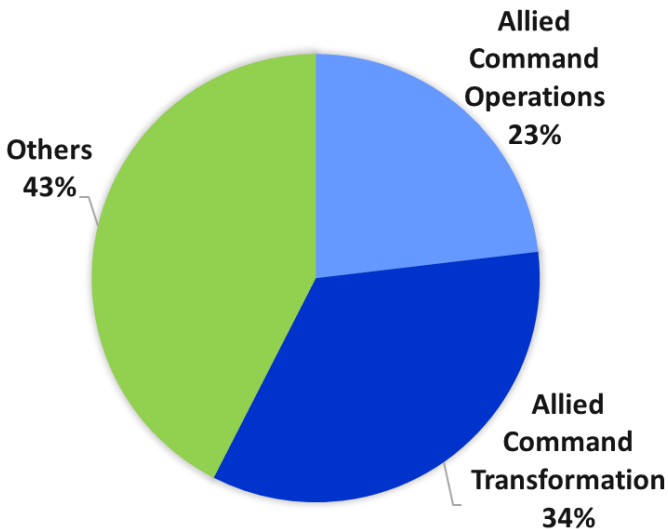
455 registered participants



“The best Virtual activity I’ve attended all COVID: many forums have improved their capacity to broadcast their content, yours included a significant capacity for interaction and the exchange of ideas beyond the usual fare”



NATO Command Structure



“Congratulation to the NLLC team for the great job and successful conference! It was truly well structured and professionally organized! Despite the technical challenges you faced you managed to overcome them in a professional way, well done!”

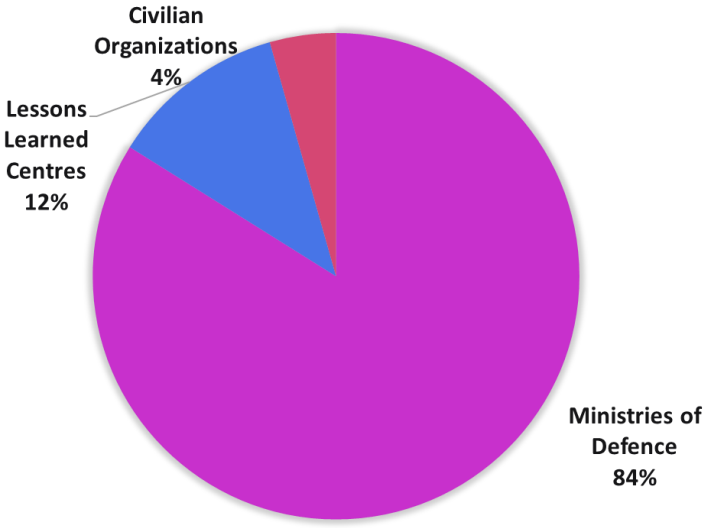


“An absolutely fabulous conference. I gained greater understanding of the NATO Lessons Learned enterprise and expanded my network with Lessons Learned professionals.”

“Excellent work! You all have my deepest admiration for pulling this one off! Capture the Lessons!”

“I openly say that it was a fantastic experience. I strongly believe that if it was on commercial tv, a lot of people around the world would have seen it”

Outside NATO



Certificates for Top 10 NLLC21 Contributors



Photos	Messages	Interactions
0	505	867
0 today	▲ 144 today	▲ 393 today

“A unique opportunity to gather NATO, Allies, Partners, International Organizations/NGO, Academia to talk about Lessons Learned.”

Post ? Sentiment ? Likes ? Comments ?

Emmanouil NIKOLOPOULOS 18h

Two days now i hear how successfully everyone adapted to covid enviroment. I am given the impression that covid not only didn't affect military life but even made it better somehow. In a LL forum i am very interested to hear an alysis of the affects that are brought to our performance and productivity which undoubtably have been affected.

😊 12 6

NLLC

Don't miss the next event!

More information will be posted on the NLLP!

Phone: +351 21 771 7007/8/9
Fax: +351 21 771 7098
E-mail: jallc@jallc.nato.int
www.jallc.nato.int
Visit the Portal: <https://nllp.jallc.nato.int>

