

Chief Executives Board for Coordination

CEB/2018/HLCM/ICT/10 19 July 2018

30th Meeting of the CEB ICT Network

World Food Programme Rome, 24 April – 25 April, 2018

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Executive Summary

The 30th session of the ICT Network was hosted by the World Food Programme in Rome between 24 and 25 April, 2018. In total there were 50 participants, 9 of which connected remotely¹. This was the Network's third meeting in Rome (2004 and 2010) and the first time WFP has hosted the ICT Network.

Many of the items on the agenda spoke to the challenges and possibilities before the UN system as a whole and highlighted the need to effectively and securely incorporate frontier technologies and adopt innovations to further both collective and individual aims. In summary, the meeting included a discussion on the outcomes of the seventh cybersecurity symposium; a demonstration from Microsoft on their new collaboration platform, Teams; insight into emerging technology trends from Gartner Group; a futuristic analysis of the AI landscape by Mr. Stephen Ibaraki; knowledge sharing items on tactical topics, including the implementation of identity federation on O365; a discussion regarding cloud strategy; and an update from the EOSG on the development of a UN system strategy on new technologies.

Plenary sessions provided an opportunity for members to share insight and experiences drawn from the successes and challenges in 2017 and also provided a platform to present their priorities for the upcoming year. Discussions at the end of the meeting addressed the need for the Network to review and update its priorities and objectives.

This was the first ICTN session operating under a revised governance structure that includes two co-Chairs:

- <u>Ms. Atefeh Riazi</u>, Assistant Secretary-General and Chief Information Technology Officer, UN Secretariat
- Mr. Jeffrey Modell, Director and Chief Information Officer, IAEA

Ms. Riazi was unable to attend the meeting, so Mr. Erzen Ilijazi served as Acting co-Chair in her place. Mr. Modell served as the second meeting co-Chair.

It was decided that further detail on the governance, scope and priorities of the network are to be addressed in a new Terms of Reference for the group, to be drafted in preparation for the Network's 31st session.

Opening of the Meeting

Mr. Amir Mahmoud Abdulla, Deputy Executive Director, WFP

The Network received a welcome address from the Deputy Executive Director of WFP, the meeting's host Agency.

The ICTN co-Chair extended his gratitude to WFP for hosting this event and for all the help her team has graciously provided in the planning and preparation. The Agenda and Programme of Work were duly adopted without changes.

Emerging Technology Trends

Mr. Michael von Uechtritz, Senior Executive Partner, Gartner Group

¹ Remote participants joined from Vancouver, New York, Frankfurt, Geneva, Nairobi, Bangkok and Geneva.

Mr. von Uechtritz explored past trends and looked to the future, based on predictions of a selected number of megatrends, diving deeper into one. Applying in practical terms Gartner hype cycles and its variations allows for a further assessment of technologies and solutions, on which he elaborated.

Offering a Digital Platform for the Humanitarian Ecosystem & O365 Ms. Enrica Porcari, CIO, WFP

WFP CIO provided insight into the work WFP is undertaking on the creation of a digital platform for the humanitarian system and follow up with a short discussion on the opportunities presented by Office 365.

Federation of Identity

Mr. Erzen Ilijazi, OIC Director, Acting co-Chair ICTN - UN Secretariat

The Network heard from UN Secretariat that Skype for Business Online has been deployed as part of the UN Secretariat's Office 365 implementation. This has enabled real-time communications, including instant messaging, audio, video, and conferencing. The service is available by default to all United Nations Secretariat users (defined as users with an @un.org email address), who have been migrated to the UN's Office 365 tenant. All member organizations of the CEB are eligible and have been preapproved to take advantage of this service.

In accordance with the Secretary General's vision on collaboration across the United Nations Common System, UN Secretariat (OICT) introduced a decision point for those ICTN members on Office 365 to federate their Office 365 tenants. This proposal was unanimously welcomed by the ICTN and duly adopted. Following the network's approval, organizations were invited to enter into bilateral agreements with UN Secretariat in order to complete this initial phase, based on the Skype for Business use case.

UN Cloud Strategy

Mr. Erzen Ilijazi, OIC Director, Acting co-Chair ICTN - UN Secretariat

The UN Cloud Strategy proposes a hybrid, multi-cloud approach. An on premise, private cloud would allow for easy integration of internally hosted systems (legacy applications) while third-party, public cloud technologies would host an increasing number of our enterprise systems and platforms. The benefits of public cloud technologies include greater scalability and flexibility as well as economies of scale. Third-party vendors are better positioned to quickly deliver new services, upgrades, and enhanced security. The UN will make use of multiple third-party providers in order to leverage specific features and services, ensure continuity, cater to diversity, and reduce dependency on vendors. UN Secretariat offered to work with all interested agencies, funds and programs in pursuit of leveraging economies of scale while fostering collaboration within the United Nations Common System.

Managing Cloud Services in the UN system Mr. Jorge Flores, Inspector – JIU

The use of cloud computing services is growing. One of the salient potential benefits of cloud computing is the ability to add new capacities and reduce costs as there is no need to invest in each organization's own information technology infrastructure.

Within this context in 2018, the JIU will embark on a review of Cloud Computing Services in the UN System. The Network learnt that in recent weeks, the Unit has had the opportunity to benefit from discussion on the scope and focus of this study with several organizations. During this segment, the JIU invited feedback on the study's Terms of Reference, particularly from organizations not yet consulted.

Transformational Technology Trends

Mr. Stephen Ibaraki, Chairman REDDS VIP Venture Capital Fund, Co-Chair ACM Practitioner Board

Mr. Ibaraki is a futurist and social entrepreneur, as well as the founder and chairman of outreach for the ITU AI for Good Global Summit with the XPRIZE Foundation. Mr. Ibaraki addressed the ICT Network on the topic of Transformational Technology Trends, focusing on the recent advancements in AI.

<u>Update on Frontier Issues from the Executive Office of the Secretary General (EOSG)</u> *Mr. Marc Jacquand, Executive Office of the Secretary General, UN Secretariat*

At its second regular session for 2017, the CEB conducted a discussion on "Implications of frontier technologies for the work of the United Nations system", which focused on opportunities and challenges of frontier technologies — with a focus on artificial intelligence, cyberspace, biotechnology and new weaponry — in order to identify specific entry points for United Nations system engagement.

The Board agreed that the United Nations system, in line with its important normative and thought leadership role deriving from the Charter, was uniquely placed to serve as an "ethical voice" and the "moral compass" to safeguard universal values, norms and standards and ensure that no one is left behind. The Board also acknowledged that harnessing the benefits of innovative technologies was essential to realizing the 2030 Agenda for Sustainable Development and must be integrated across United Nations efforts to support the implementation of the Sustainable Development Goals. At the conclusion of that discussion, the Secretary-General proposed and the Board agreed to develop a road map for further United Nations engagement on frontier technologies that included both external engagement on, and the internal application of, these technologies.

Mr. Jacquand from the Strategic Planning Unit in the Executive office of the Secretary General briefed the Network us on latest developments in harnessing these technologies and further strengthening the UN's moral role in the positive advancement of frontier technologies, including recent progress on the development of the UN Secretary General's strategy for new technologies.

Cybersecurity

Mr. Thomas Braun, Chief Information Security Officer, UN Secretariat

The seventh gathering of the UN Information Security Special Interest Group (UNISSIG) took place in UN Secretariat headquarters, New York, between 30 January and 1 February 2018. The Chair of the UNISSIG, Thomas Braun, presented the outcomes of the meeting, which included the symposium report (with recommendations), the UNISSIG work-plan and a revised terms of reference for the UNISSIG. Feedback from the Network on these items was received both during and after the meeting. Recommendations of the UNISSIG are categorized below by topic and by approval status.

Digital Identity

UNISSIG Recommendations Approved by ICTN:

- The scope of an internal survey be expanded to determine where each organization stands on authentication, access policies and security architectures;
- A feasibility assessment of federated identity management among CEB member organizations starts with a review of governance models implemented by organizations.

Privacy & Data Protection

UNISSIG Recommendations Approved by ICTN:

- While GDPR is a regional law and the UN is not subject to regional and national law, certain provisions could be taken into account while drafting the UN own privacy policies and procedures. This is currently being undertaken by the UN Privacy Policy Group;
- UNISSIG requests ICTN to seek guidance from the Legal Network on the official position of the UN system of organizations in relation to the GDPR. Since the meeting, Ms. Riazi, as co-Chair of the ICTN, has written to the Chair of the Legal Network to request this formal guidance;
- Organizations are encouraged to review the GDPR in order to identify and align with best practices relating to the handling of personal information and to uphold obligations as set forth in UN resolution 45/95;
- ICTN is encouraged to follow the work that results from the UNPPG and stay informed on the development of the UN Privacy Principles.

Incident Detection & Response

UNISSIG Recommendations Approved by ICTN:

- Timely detection of an incident is necessary to avoid escalation. It is essential to collect threat intelligence that includes indicators of compromise, to help anticipate and prevent incidents;
- A formal assessment of UN system organizations' exposure to risk would benefit from an inventory of incident detection tools, protocols, practices and processes, the group committed to incorporating this requirement within the scope of an annual survey;
- The STIP governance committee proposes to change from STIP to a MISP platform, and to establish this system at UNICC premises;
- Organizations interested in joining the STIP/MISP initiative were invited to submit their interest to the UN, for consideration by the STIP Governance Committee.

Information Security Awareness Training

UNISSIG Recommendations Approved by ICTN:

- Information security awareness training for constituencies be made mandatory and, at the very least, be undertaken on an annual basis;
- As part of organization awareness training programmes, organizations should include regular and controlled phishing awareness campaigns;
- Organizations are also encouraged to share their training materials on the UNICC portal;
- A working group be established to review and update the common information awareness training syllabus.

UNISSIG Recommendations Changed by ICTN:

• Organizations are encouraged that awareness training be role based, thereby addressing the sensitivity of data within the responsibility of different functions and therefore contribute towards the reduction of organizational risk;

Information Security Benchmarking

Comments received on the subject of information security benchmarking voiced that the UN system itself is not a monolith and so it may not make sense to do a collective assessment. If it is, on the other hand, intended to be a cumulative assessment of the individual organizations, it was clear that some organizations would not be willing to expose any assessment of its information security exposure outside of their organization.

UNISSIG Recommendations Changed by ICTN:

• Members are encouraged to perform regular risk assessments and to brief their respective executive board on the results.

UNISSIG Recommendations Rejected by ICTN:

- As part of a regular exercise, UNISSIG conduct an internal benchmarking survey, allowing for the global assessment of individual organizations' cybersecurity activities and maturity in order to evaluate exposure to risk;
- UNISSIG commits to publishing an annual UN system Cybersecurity Risk Report, drawing on the results of the internal benchmarking survey;
- As a complement to data generated by the proposed UNISSIG annual survey, ICTN consider a consistent approach to the calculation of information security spend as a percentage of ICT budgets and likewise, provide ICT spend as a percentage of their total budget;

Cloud Risk Management

UNISSIG Recommendations Approved by ICTN:

- Prior to developing in-house processes and frameworks, organizations are encouraged to research existing resources from recognized authorities, including the Cloud Security Alliance;
- Periodic evaluations of cloud service providers be undertaken. The frequency of evaluations is dependent upon the risk profile of the data being considered;
- CASBs should be considered when planning to move workloads and data to the cloud.

Frontier Technologies: Blockchain

UNISSIG Recommendations Approved by ICTN:

• Organizations consider entering into formal collaboration with World Bank's Technology and Innovation Team in pursuit of blockchain based solutions;

UNISSIG Recommendations Changed by ICTN:

• Organizations are strongly encouraged to ensure that controls implemented in SLDC are also implemented by innovation teams when they are developing blockchain based solutions.

UNISSIG Terms of Reference

Comments received on the UNISSIG objectives:

• For some organizations, the "holistic approach" proposed within the Terms of Reference could include collaboration with the UN system organizations, but would ultimately be owned and maintained by each organization;

• Organizations agreed with a coordinated approach but not a consistent one, since security must vary according to each organization's context.

UNISSIG Recommendations Approved by ICTN:

- UNISSIG agreed to expand the participation at annual meetings to non-CEB organizations. Subject to the approval from UNISSIG membership, non-CEB member organizations may be invited to attend in an Observer capacity;
- ICTN review and approve the proposed UNISSIG Terms of Reference, rewritten by the UNISSIG in order to add clarity to the group's mandate, membership, working methods and reporting lines.

UNISSIG Recommendations Rejected by ICTN:

• Future meetings be longer in duration in order to accommodate an expanding agenda, knowledge sharing and for the deliberation of recommendations. If required, the Network proposed that intermediate meetings should be conducted by teleconference.

UNISSIG Collaboration Platforms

UNISSIG Recommendations Approved by ICTN:

- Requests for access to UNISSIG collaboration platforms be directed to CEB Secretariat;
- Requests must come from a CEB member organization, or recognized Observer organization;
- One member per organization for both the UNISSIG mail list and collaboration site. Membership criteria as set forth in Terms of Reference applies (CISO function);
- Registration requests must be supported personally identifiable email addresses (generic email addresses not allowed);
- Registration requests must come accompanied by a 'trusted' connection (i.e. no unsolicited/unknown requests to join);
- Registered members remain responsible for ensuring that their organization is up-to-date as far as registrations are concerned on both the mailing list and the SharePoint platform.

UNISSIG Work-Plan

Subject to the exceptions listed above, the ICTN reviewed and approved initiatives presented on the UNISSIG work-plan. In so doing, the ICTN confirmed its commitment of resources implied by working group leadership/membership.

UN Cybersecurity Strategy

Mr. Braun presented a summary of the UN Cybersecurity Strategy. This item was included on the agenda for information only, since the paper was prepared for the Secretary General's Senior Management Group (SMG) and, therefore, not subject to a formal review and consultation process that included either the UNISSIG or the ICTN.

While this item was for information only, some comments nevertheless focused on the value of including the UNISSIG and the ICTN within the review of items that fall within their scope. However, it was noted that most members of the ICTN (and UNISSIG) were consulted during the review process, on account of their organization's representation at the SMG and that this update was presented for information only.

Big Data Partnerships

Mr. Lambert Hogenhout, Chief Analytics, Partnerships and Innovation, UN Secretariat.

Mr. Hogenhout briefed the group on the latest thinking and UN Secretariat initiatives to establish big data partnerships, an increasingly essential component of any strategy based on innovation or frontier technologies.

In order to stay relevant, it was argued, it has become essential to use data effectively in analysis and decision making, in supporting our daily work--not only the data that we have already, the data that we are familiar with, but also new sources of data. Data partnerships, then, have become an important new area of collaboration that the UN system should pursue. This activity benefits from clarity on what data would be of value and which entities would be able to provide data the UN system. It was underlined that strategic partnerships that result in data benefits from a compelling case for how this data will help improve the world, in addition to providing our partners with some guarantees.

The Network learnt that within the UN Secretariat, OICT has developed a strong data analytics capacity and is now venturing into more advanced fields of data processing such as natural language processing (NLP) and machine learning. This also involves ways of making the data available effectively and responsibly, to business entities in the organization – our Data Governance mechanisms need to be well functioning and underpinned by a robust data architecture.

In addition, we need to be able to show partners we have clear stance and policies on how we treat data. In particular, abuse of personal data has frequently been in the news recently. This need has been advanced by a working group on Data Privacy, led by Global Pulse and OICT with over 30 representatives from various UN organizations, have created a common set of draft principles on protection of personal.

Modern Workplace

Ms. Jenni Rantakari, Head of Modern Workplace Solutions and James Hoggett, Office 365 Lead, Microsoft.

The Network received a presentation from Microsoft on the "Modern Workplace", Microsoft's platform that facilitates collaborate in daily tasks. Microsoft shared with the ICT Network some highlights from the current capabilities and will provide a preview of their future vision. Topics falling under the scope of this presentation and ensuing discussions included: Teams (demonstration); AI features; Video sharing, training and communications; and security.

Big Data - Analytics on Azure Mr. Viktor Polic, CISO – ILO

Big Data, partnerships and analytics are directions for the UN to follow, and increasingly an essential component of achieving our mandate. Whether in operational or programmatic environments, the analysis of big data sets represents skills and platforms we need to remain up-to-speed on. Mr. Polic from ILO presented to the Network a proof of concept developed for the migration of big data infrastructure for information security analytics to Azure.

Semantic Markup of UN Documents

Mr. Flavio Zeni, Project Coordinator - CEB Secretariat, Mr. Gerrit Potoms, Head of Unit for Evolution & Maintenance - European Parliament (DG ITEC)

The Network received an update on the CEB Secretariat (HLCM) project, which addresses the use of natural language processing and cognitive services for semantic markup UN parliamentary and normative documents.

Defining the Objectives of the ICT Network *Plenary discussion*

Within a discussion focused on the strategic priorities and objectives of the ICTN, a survey was undertaken in real-time (using Mentimeter) to collect members' preferences. A summary of the responses received is provided in Annex 2. These responses are to be incorporated within the Network's revised Terms of Reference, to be discussed at the Network's 31st session.

31st Session of the ICTN

UN Secretariat's offer to host 31st session of the ICTN, in NY in the fall, was unanimously accepted.

Annex 1 - List of Participants

Note: Participants are listed below alphabetically, on the basis of their first name. Asterisks denote remote participation.

| Organization | Participant | Title |
|--------------------------------|------------------------|---|
| ICJ | Alvaro Flores | Head of ICT Division |
| UNIDO | Ana Paula Nishio Sousa | Chief, Information and Communication Management Service |
| WHO* | Biswamber Gurubacharya | Manager, Platform Services |
| UNAIDS | Christophe Lanuit | Chief, Innovation & Development |
| UNICEF | Daniel Couture | Chief Information Officer, ITSSD |
| Global Pulse Advisory Group | David Watts | Professor of Information Law and Policy, La Trobe University, Melbourne, Australia |
| JIU | Dejan Dincic | Team Member |
| UNOPS | Dennis Cleary | Senior ICT Advisor |
| UNHCR | Douglas Greene | Director and Chief Information Officer |
| WFP | Enrica Porcari | CIO and Director, Information Technology Division |
| UN | Erzen Ilijazi | OIC Director, Acting co-Chair ICTN |
| WTO | Fabrice Boudou | Director, IT Solutions Division |
| CEB Secretariat | Flavio Zeni | Project Coordinator, UN Semantic Interoperability Framework (UNSIF) |
| ITC-ILO | Gael Lams | Team Leader, Web and Communication |
| European Parliament | Gerrit Potoms | Head of Unit for Evolution & Maintenance (European Parliament – DG ITEC) |
| UNESCO | Ingrid Regien | Chief Information Officer |
| Microsoft | James Hoggett | Office 365 Lead, EMEA |
| IAEA | Jeffrey Modell | Director and CIO, co-Chair ICTN |

| Organization | Participant | Title |
|-----------------|-----------------------|--|
| Microsoft | Jenni Rantakari | Head of Modern Workplace Solutions, EMEA |
| UI | Jesus Lara | SEIO |
| UI | Jorge Flores Callejas | Inspector |
| UN-HABITAT* | Kamal Naim | IT Officer, Head of ICT Unit |
| ICC-CPI | Kelly Mannix | Chief, Information Management Services Section |
| UN* | Lambert Hogenhout | Chief Analytics, Partnerships and Innovation (OICT/DM) |
| UNFPA | Luca Baldini | Director, Information Technology and Solutions Office (ITSO) |
| UN* | Marc Jacquand | Strategic Planning Unit, Executive office of the Secretary General (EOSG) |
| ILO | Mark Mongillo | Chief Information Officer and Director, INFOTEC |
| WMO | Martin Fuhr | Chief, Information Technology and Common Services Division |
| UNCTAD | Massimo Sartoris | Chief, Business Applications Unit |
| Gartner Group* | Michael von Uechtritz | Senior Executive Partner |
| FAO | Minori Hara | Deputy Director, IT Division |
| IOM | Mumbi Gichuki | Global ICT Operations Manager, ICT Manila |
| IMF | Patrick Hinderdael | Deputy CIO/Acting CIO |
| UNDP | Paul Raines | Officer-in-Charge of OIMT and CISO |
| ILO | Petra Marshall | Chief Technology Officer and Chief of Technology Management Services, INFOTEC |
| ICC | Ray Compton | Programme Director and Officer-in-Charge of ICC |
| CEB Secretariat | Remo Lalli | HLCM Secretary |
| CEB Secretariat | Richard Maciver | Inter-Agency Officer, ICT |
| UNEP | Saiful Ridwan | Chief, Enterprise Solutions Section |

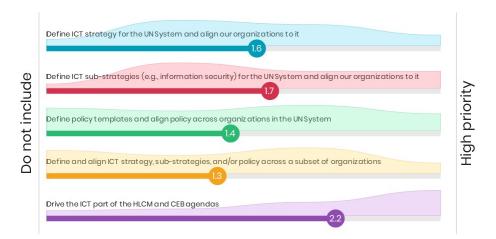
| Organization | Participant | Title |
|------------------------------------|----------------------|---|
| UNICC | Sameer Chauhan | Chief, Clients & Projects |
| ΙCAO | Sanya Dehinde | Chief, Enterprise Technology and Services section |
| UN Women | Soren Thomassen | Chief, Information Systems and Telecommunications |
| REDDS VIP Venture Capital Fund* | Stephen Ibaraki | Chairman REDDS VIP Venture Capital Fund, Co-Chair ACM Practitioner Board |
| IFAD | Thomas Bousios | Director and CIO |
| UN* | Thomas Braun | Chief Information Security Officer |
| СТВТО | Tryggvi Edwald | Chief, IDC/Automatic Processing Systems section & OiC, IDC/Operations section |
| РАНО | Valentin Prat Padros | Director, Information Technology Services |
| ILO* | Viktor Polic | IT Security Officer |
| IMO | Vincent Job | Senior Deputy Director/Head ICTS |
| WIPO* | Wei Lei | Chief Information Officer |
| UNCTAD | Win Myint | Chief Budget, Project and Finance Section |

Annex 2 – ICTN Survey Responses

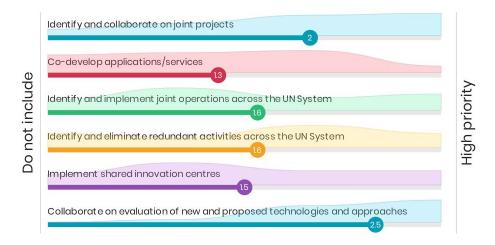


The Network was asked to rank key themes that deserve focus in future meetings. The above graphic represents the responses received, the size of each work within the word cloud denotes its importance. Participants were then asked to rank objectives from a categorical listing, as shown below.

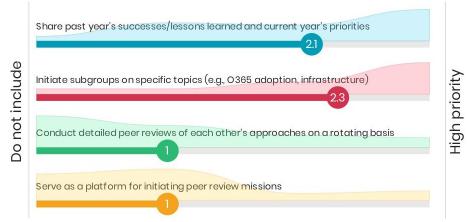
Strategy, Policy & Compliance



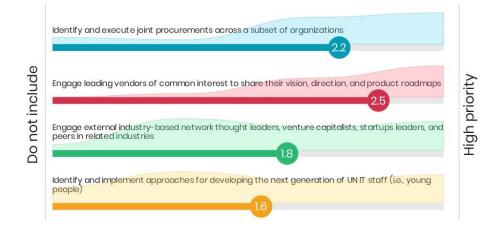
Shared Projects & Operations



Peer Networking & Support



Procurement & External Engagement



Other Objectives

The following are suggestions for areas of focus that were not provided as options, but suggested by members:

- Benchmarking;
- Build common standards;
- Joint Security Initiatives;
- Work in impact from UN reform to ICT;
- Information sharing on outcomes of CEB;
- More focus on current sharing challenges;
- Ideas for leveraging solutions built by one organization by others.