



Shaping the Future 2021
Muscat, OMAN

Monday 6th & Tuesday 7th December 2021

DIGITAL ADDRESSING GLOBAL SOCIETAL CHALLENGES
DIGITAL SOLUTIONS FOR A SMARTER, MORE SUSTAINABLE AND RESILIENT WORLD

Sunday 5th December
Welcome Event [7:00 pm to 9:00 pm]

Monday 6th December [8:45 am - 12:30 pm]

Welcome Addresses [8:45 am – 9:15 am]

Opening Session: Future Visions [9:15 am – 10:30 am]

- Digital Visions in a World Full of Challenges

Session as a dialog, led by multi-disciplinary presentations on visions for the role of technology in human endeavor, recognizing the need to place technology in the context of solving the great problems facing all societies. We must find ways for governments to develop policies regarding the role of technology that protect privacy while stimulating innovations that contribute to problem solving

S1: Wireless and Wireline Infrastructures: the Upcoming Challenges
[10:30 am – 12:30 pm]

- 5G: Global Status, Concerns, and Deployment Perspectives
- IoT
- Cloud Computing
- Quantum Computing: Very high Speed & Network Security
- The Challenge of Integrated Platforms
- Artificial Intelligence: New Developments (Cognitive & Quantum Computing, Machine Learning, Deep Learning, Predictive AI, Robots...) – Integration into 5G, AI and other Digital Technologies
- Main Global Discussions about Intelligent Infrastructures: Technological Sovereignty, Strategic Autonomy, Cyber Security, Spectrum Allocation
- Policy Options: Between Moratorium and Acceleration to Address New Needs in Health, Climate & Energy, Mobility, Defense & Security
- The Place of Digital infrastructures into Stimulus Plans in Europe, North America, Asia
- A Broad Range of New, Innovative and Disruptive Services
- Operators Perspectives (Telecom Networks; Satellite Networks; Internet Providers; Industry Companies as Emerging Players) ...
 - Software and IT services
 - Media contents and issues

Lunch [12:30 pm – 2:00 pm]

Keynote Session: [2:00 pm – 2:45 pm]

- Collaboration Between the Digital and Human Worlds: Importance of a Human Centered Approach
- Ethics of Emerging Tech
- Corporate Social Responsibility – the *Onlife* Approach in Europe.

S2: Disruptive Digital Technologies Artificial Intelligences, IoT, 5G, Blockchain ... [2:45 pm – 4:15 pm]

- Developing Policies for Managing AI
- Trustworthy AI
- Principles for Balancing Privacy with Public Safety
- Data Privacy Issues in the context of the new coronavirus crisis management
- New Developments (Cognitive & Quantum Computing, Machine Learning, Deep Learning, Predictive AI, Robots...)
- Data Concentration Risks
- Role of Encryption Technologies For Data Securing
- The Augmented Man Issue
- AR/VR Augmented Issues & Virtual Reality issues

Coffee Break

S3: Designing a Regulatory, Policy, & Governance Framework Addressing Safety Security & Accountability in a Complex World [2:45 pm – 4.15 pm]

- Accountability Standards
- Decoupling US and China Telecom and Technologies and the Global Consequences of Separation
- Regulatory Frameworks and Policy Tools: New Ways to Regulate IoT, Satellites, 5G, AI, IoT
 - Differences in Technology Impacting Regulation
 - Dynamic Regulation Favoring Flexibility
- Antitrust: Too Big to Fail / Too Big to Regulate
- Digital Tax Dilemmas
- National Security Issues in Telecom
- Protecting Data & Privacy (GDPR; Digital Ethics; etc...)
- Cyber Risks and Sovereign Assets Management and Governance

Coffee Break

S4: Industry 4.0 / Smart Industry [4.30 pm – 6.00 pm]

- Towards Development of International Collaborations
- Digitalization Transforming Industry, Finance, Agriculture, Commerce...
- Extreme Customization
- Process Productivity & Quality Control (Evolving Smart Factories –Robotics, Automation, Opportunities & Safety Issues; Liability & Insurance...)
- Logistics & Global Supply Chains (Mobility 4.0: Integrated & Intelligent Transport...)
- Blockchain
- AI Capabilities to Create Business Value
- What is an Industry4all

S5: Women Pioneers at the Intersection Between Economic and Environmental Development [4.30 pm – 6.00 pm]

- Emerging Skills in the Digital Economy (women angle)
- Women in Digital Start-ups
- Innovations in Services

GALA DINNER [7:30 pm to 10:30 pm]

Tuesday 7th December [8:45 am – 1:00 pm]

Keynote Opening Session Day 2 [8:45 am – 9:45 am]

How digital is used for more resilient societies and at social innovation, where it's important in light of Covid-19 and other global threats and challenges to reexamine what we mean by sustainability and to re-define resilience in this context

- COVID-19 Impacts & Resilience
- How the Pandemic Changes Our Society and How to Design the Future

S6: COVID-19 Pandemic as a Technology Accelerator? [9:45 am – 11:15 am]

- Enhancing Digital Capabilities
- New Services that Are Accelerated (e-commerce, ed-tech, etc.)
- Digital Systems Developed to Fight Covid
- Ways to Create Data Frameworks for Collaboration
- Cross-boundary Information Sharing Principles”
- Data Access Challenges
- The Opportunity to Reduce Carbon Emissions
- The Impact of Teleworking
- Preventing Risks of Global Surveillance

Coffee Break

S7: Sustainable Smart, Cognitive Cities, Regions & Communities & Tech for Good [11:30 am – 1:30 pm]

- Sustainable Urban Developments
- Decentralized Innovation in Cities in Mobility, Smart Energy, Intelligent Buildings ...
- Combining Digital and Nature Based Solutions...
- Data and Knowledge Sharing Issues / Interoperability (Public Data and Open Source)
- Investing in Innovation to Get Out of a Difficult Economic Situation
- Innovation in Smart Cities During COVID-19: New Health Challenges for Local Authorities
- IoT & Data Analytics Opportunities for Smart City & Smart Grid
- Digital & AI at the Service of the Citizen
- Mobility: AI + 5G
- Digital as an Enabler for Sustainability, Climate Mitigation & Adaptation, Water Management Solutions, Renewable Energy
- Urban Agriculture and Digital Innovation. Towards a Self-Sufficient future?
- Community Engagement & Co-Creation
- Regenerative and Restorative Circular Cities, the New Localism and Digital Technologies

S8: Digital Healthcare & Global Challenges [11.30 pm – 1.30 pm]

- Global Vision of Health (Incorporating Social Determinants of Health)
- Inclusive Health – how digital is increasing the reach
- Patients Pathway (Smart Hospitals, Robotisation, Artificial Intelligence, Virtual Reality, AR...)
- Patients Empowerment
- Personalization of Healthcare
- Services for Silver Usages
- Mobile Health & Telemedicine
- Simulation to Improve Safety & Quality in Healthcare
- Connected Health/ Benefits of Sharing & Interoperability
- Remote Patient Monitoring for Healthcare (Wearables, Video Technology and Others ...)
- How Pandemic Crisis Changes Healthcare Implementation

Lunch [1:30 pm – 2:30 pm]

Afternoon Special Program – Explore Oman [3:00 pm – 5:30 pm]

Option I: Hi-Tech Visit the AR/VR Design Lab at Knowledge Oasis Muscat (KOM)

Option II: Culture & History Guided tour Muscat old Town and National Museum – with some key technology features

Option III: Nature– boat tour Dolphins & Turtles (snorkeling optional)

International Scientific Committee

EUROPE & MIDDLE EAST

Jørgen Abild Andersen, Founder & CEO Abild Andersen Consulting, Denmark; **Ingrid Andersson**, Associate Senior Expert, IKED, Sweden; **Marta Arsovska-Tomovska**, Former Minister for ICT and Public Administration in Macedonia, Advisor the Serbian Prime Minister for PAR and Digitalization; **M. Sherif Aziz**, Advisor Strategic Planning, Madayn, Oman; **Jean-Pierre Bienaimé**, Chairman, Institute of Economic & Social Research on Telecommunications (IREST), France; **Wladimir Bocquet**, Director of Spectrum Management & Policy, Eutelsat, France; **Jean-Pierre Chamoux**, Professor, University Paris Descartes, France; **Mariane Cimino**, CEO, Hoa-Ora, France; **Philippe Denis**, Computer Scientist & Visual Artist, Digital Strategist and Innovative Thinker, France; **Margot Dor**, Director of Government Affairs, ETSI, France; **John Giusti**, Chief Regulatory Officer, GSMA, United-Kingdom; **Stéphane Grumbach**, Senior Scientist, INRIA; Deputy director IXXI, Complex Systems Institute, ENS Lyon, France; **Steven Lafosse Marin**, Founder & CEO, UMAN, France; **Hugo Kerschot**, Founder, IS- Practice, Belgium; **Latif Ladid**, President IPv6 Forum, Luxembourg; **Eric Legale**, Managing Director Issy Media, City of Issy-les-Moulineaux, France; **Desiree Miloshevic**, Senior Public Policy and International Affairs Adviser, Afiliias, Ireland; **Jeremy Millard**, Senior Consultant, Danish Technological Institute, Denmark; **Alice Pezard**, Attorney at Law & Arbitrator, France; **Pascal Poitevin**, Digital Strategy Consultant, France; **Gérard Pogorel**, Professor of Economics and Management-Emeritus, Telecom ParisTech, France; **Alfredo M. Ronchi**, Secretary EC Medici Framework, Politecnico di Milano, Italy; **Joël Ruet**, CNRS Researcher, Paris-North Economic Center, associated with the Management Research Center of Ecole Polytechnique; Chairman, TheBridgeTank, France; **Gérald Santucci**, Ambassador INTEROP-VLab, Belgium; **Claudia Selli**, European Government Affairs Director, AT&T International External Affairs, Belgium; **Dan Shefet**, Lawyer founder of Cabinet Shefet, France; **Benedicte Suzan**, CIS, Technical Authority, R&T coordination & Innovation, Public Affairs, Airbus Defence and Space, France; **Daniel Van Lerberghe**, Co-Founder & Director, InnoGage Ltd, Belgium; **Colin Williams**, Director SBL, United-Kingdom; **Randy Yaloz**, Founding Partner & Attorney at Law, E.L.C. Group, France

ASIA & OCEANIA

Nitya Karmakar, Professor, Peter Faber Business School, Faculty of Law and Business, Australian Catholic University, Australia; **Chetan Sharma**, COO & Director, Datamation Group, India; **Yoshio Tanaka**, Professor Tokyo University of Science, Japan; **Sarah Zhao**, Partner, Baker Hostetler, USA

NORTH AMERICA

Sylvie Albert, Professor, Department of Business and Administration, University of Winnipeg, Canada; **Don Davidson**, Director Cyber-SCRM, Office of the President, Synopsys, USA; **Jay E. Gillette**, Secretary Digital Policy Institute, Professor, Center for Information and Communication Sciences, Ball State University; **Julia Glidden**, Corporate Vice-President, Commercial Strategy & Operations, Microsoft, USA; **Laszlo Horvath**, President ActiveMedia, USA; **Andrew D. Lipman**, Partner and Head of Telecom Group, Morgan, Lewis & Bockius, USA; **Samia Melhem**, Global Lead, Digital development Infrastructure and PPP Global Practice, The World BankGroup; **Brent Olson**, Vice President - Public Policy, AT&T, USA; **Ambassador Miriam Sapiro**, Managing Director, SardVerbinnen & Co, USA; **Alan Shark**, Executive Director & CEO, Public Technologies Institute; Associate Professor, George Mason University, USA; **Dan Shoemaker**, Principal Investigator and Senior Research Scientist, University of Detroit Mercy - UDM's Center for Cyber Security and Intelligence Studies, USA; **Tamara Shoemaker**, Director University of Detroit Mercy Center for Cyber Security & Intel Studies, USA; **Michaël Stankosky**, Professorial Lecturer, Engineering Management & Systems Engineering, George Washington University, USA; **Theresa Swinehart**, Senior Advisor to the President on Global Strategy, ICANN; **Paul Wormeli**, Executive Director Emeritus Integrated Justice Information Systems (IJIS) Institute, USA;

AFRICA

Amadou Daffé, CEO & Co-Founder, Gebeya, USA; **Ali Koné**, COO & Co-Founder, Coders4Africa, USA; **Koffi Fabrice Djossou**, Regional Director, Gilat Telecom, Israel; **Effat El Shooky**, Director, Women-To-Work Program, National Council For Women, Egypt; **Anne-Rachel Inné**, VP Government Engagement, ICANN