

Interinstitutional files: 2018/0328(COD)

Brussels, 03 April 2020

WK 3513/2020 INIT

LIMITE

CYBER CSC
TELECOM CSCI
CODEC IND
COPEN JAI
COPS RECH
COSI ESPACE

WORKING PAPER

This is a paper intended for a specific community of recipients. Handling and further distribution are under the sole responsibility of community members.

WORKING DOCUMENT

From: To:	Romanian delegation Delegations
Subject:	Non-paper on hosting the Cybersecurity, Industrial, Technology and Research centre in Romania

Delegations will find in Annex a non-paper by Romania on the above-mentioned subject.



FUTURE-FIT AND FUTURE-PROOF

ROMANIA'S NON-PAPER ON HOSTING THE CYBERSECURITY INDUSTRIAL, TECHNOLOGY AND RESEARCH CENTRE





The future is digital.

From commerce to communication, from finance to medicine, from transportation to the Internet of things, technology now underpins the widest range of human activity. Digital economy is an excellent area where we can create conditions for prosperous and sustainable economies and societies but also new opportunities, especially as concerning the jobs and education for young people and for developing new innovative start-ups and businesses.

The future brings many challenges.

Be it cyber-attacks, fake news or hybrid warfare, technology can be used to undermine the very core of our free, democratic societies. The EU needs not only strategic foresight on the digital *modus vivendi*, but also a complete cyber-security toolkit, enabling it to safeguard the entire value-chain of cybersecurity and protect itself against any action meant to de-stabilize it. Romania can deliver on both ends, contributing to making the EU become both future-fit and future-proof.

While recognizing the opportunities ahead generated by the advanced and disruptive technologies, we pay particular attention to the evolving challenges in the cyberspace. We are determined to make an effective contribution to building EU leadership in cybersecurity, be it in its industrial, technology or research avatars.

Not simply because we can do so, but because we see it as part of our role as members of the EU family.

During the last two decades, Romania proved high professionalism and gained appreciation in all security related projects, attaining an important role in ensuring security in our region and beyond. Hosting the Cybersecurity Industrial, Technology and Research Centre represents for Romania a serious and competitive proposition, considering its profile as a reliable security partner for all its allies and partners.

Why Romania?

Romania has a digital-oriented mentality and innovative footprint. As a highly committed member state to all European values, we have wide openness for embracing new cultures, ideas, technologies, applications and the new digital way of living and doing business.

Romania has been a predictable and reliable partner, with a strong pro-European profile, constantly dedicated to contributing to the consolidation of the European project. The excellent performance of the Romanian EU Council Presidency has further consolidated this stance. Romania has shown that it is capable of exercising effective leadership at EU level, in the benefit of all European citizens, guided by the aim to search for consensus and acting as an impartial mediator in the European decision-making process.

The Romanian EU Council Presidency has successfully promoted the unity of action, managing to contribute, through substantial and concrete results, to the advancement of the European project, including on security area. At the same time, Romania has shown that it can perform successfully in a difficult European context.

Furthermore, Romania is a pillar of stability in the region and has a unique geostrategic position in the Black Sea area.



Romania is the 6th largest country in the EU in terms of population and ranks first in the EU in terms of economic growth (5.7%), more than double the EU average (2.4%). Romania offers attractive conditions for Foreign Direct Investments, thus sustaining an economy that generates new jobs at a steady pace, which relies on a multicultural environment with a high percentage of language skilled citizens.

Romania has a vibrant and dynamic society, constantly evolving. It has highly skilled people, contributing to research and innovation in the field of cybersecurity, with

leading researchers, students and professors, prioritizing scientific collaboration between the academic sector and the industry.

Romania is, equally, eager to contribute to projecting and building the future of the EU. The young generation believes in Europe and is actively involved in debates about its future. Romania hosting the Centre would echo and consolidate their belief and further their attachment to European values and common future, allowing our country to continue growing into its EU role.

While recognizing the unprecedented opportunities offered by the advanced tech, Romania pays a particular attention to the evolving challenges in the cyberspace, to the respect of fundamental rights, freedom of expression, personal data and to empowering people in the democratic processes, thus bringing an important contribution to the objective of making the EU's online environment the safest in the world.

Digital economy is an excellent area where we can create conditions for prosperous and sustainable economies and societies but also new opportunities, especially as concerning jobs and education for young people and for developing new innovative start-ups and businesses.

Romania represents the ideal hub and is involved in new forms of digital cooperation meant to address the threats and challenges of technological innovation and to contribute to multilateral digital governance. It is therefore only natural that Romania has the potential to catalyse EU's efforts towards a consolidated and coherent approach to future-proofing its vital cybersecurity-wise interests.



Romania - a top-notch industry for the development of digital and emergent technologies

Romania is rightly recognized as "the European Sillicon Valley", if we are considering only a few Romanian brands that are internationally appreciated as major innovation capabilities: Bitdefender, UI Path, Allview, Typing DNA, SoftVision, TotalSoft, Tremend, Qualitance, AROBS, Fortech, Qubiz, DataNet, Dendrio (Crescendo + Bitnet), Fintech OS, BitSentinel, PenTest Tools, CertSign, TransSped, e-BODA, Evolio, SensyTouch.

Romania is host of some of the most important international cyber exercises, such as SOPEx, BlueOlex, CyDex, Cyber Europe exercise, LockedShields, Cyber Coalition and many others.

As a dynamic and future-oriented country,
Romania was a first-mover in terms of
embracing and capitalizing on new
technological trends and digital services.
A visionary start-up created in a small office in
Bucharest is already one of the global leaders in
software robots, automation and artificial

intelligence. Romania's expertise in various areas such as cyber security, research and innovation, hi-tech and IT are proof of its potential to further develop at European level.

Excellent high-speed communications infrastructure

Romania offers wide availability of fast and ultra fast broadband networks.

Romania ranks 3rd in the EU in terms of ultra-fast broadband subscriptions (45% of households).

The use of social networks is far more widespread than in all other EU countries, with Romania being in the first place in the EU with 86% of Internet users (65% EU average).



Romania was an early adopter in data economy, which explains why the Romanian IT&C and creative sectors have one of the highest shares of national GDP in the entire Union.

Across our country, thousands of highly skilled engineers - men and women, because gender balance is key to us – are working to advance digital technologies, whether it's smart transportation, 5G and the Internet of Things, blockchain, space technologies or digital agriculture. Therefore, Romania has the capacity and will to contribute to making the Union future-fit, digital-ready and cyber-secure.



Full compliance with gender equality principles

Romania is fully respecting the gender equality principles. As the figures of DESI report shows, Romania ranks 3rd in the EU in the share of women among all ICT specialists (25.7% in 2017, compared to the EU average of 17.2%) and ranks 11th in terms of the gender pay gap, with a difference of 16%.

Romania has developed an innate ability to assess and manage risks, a thorough understanding of situational analysis, as well as high capacity for integrated and coordinated responses and recognized excellence in cyber.

Furthermore, Romania has a significant operational experience in cyber security and defence, both at national and international level, which is widely recognized for at least 10 years. It brings a sound contribution to the development of the main Smart Defense Projects (MNCD2, MNCDET, MISP) for Cyber Defense Capability Development at NATO level. It also has been for years, along with CCDCoE/Estonia, the developers of the NATO Cyber Coalition exercise – the flagship exercise that tests the correlated reaction to counteract cyber-attacks in NATO member states.

Brilliant and talented IT specialists and engineers

Romania ranks 6th among the EU Member States in number of ICT graduates, with a percentage of 4.9% of all graduates.

There are over 15 programs of cybersecurity developed in over 11 university centers and high schools, on topics ranging from cybersecurity of the military information systems, cryptography, digital investigations, machine learning and network security. Some of these programs have been developed by public institutions, such as CYBERINT or by private companies, such as Bitdefender and Cisco.



Romania provides for PHD studies in cybersecurity within the Romanian Academy, Polytechnic University of Bucharest and the Military Technical Academy.

At national level, Romania has showed already its high capabilities to protect its systems from incidents, malicious activities and to counter efficiently cyber risks and threats. It also made huge efforts and efficiently contributed to developing not only national but also European capacities, resources and processes to prevent, detect and respond to the most sophisticated cyber security incidents.

Bucharest is becoming one of the regional hubs for business and tourism and is an important higher education Centre, especially in the IT&C sectors. It offers accessible infrastructure, good connections and strong educational and medical care system. It offers safe and excellent working and living conditions in an open, friendly and welcoming environment, with widespread optic fibre networks, leading to superior internet access and data transmission rates, the foundation of the future Gigabit society.



Romanian Computer Security Incident Response Team (CERT-RO) was first in Europe and second in the world to set-up a Single Emergency Number (1911) which is operational 24/7. The following graph presents the number of incidents on monthly basis. It is important to notice that with the introduction of the Single Emergency Number (1991), the number of alerts has increased. The information obtained through this system contributed to the launch of campaigns of prevention and awareness, among which we can mention the "Ransomware Campaign in the medical system" and "Microsoft Tech Support Fraud".



Romania is committed towards acting as a catalyst for gradual and proactive industrial change, offering the main instruments to pool investment in cybersecurity research, technology and industrial development.

Not only is it time for Romania to finally host an EU centre, but, given our readiness and commitment towards acting as a catalyst for proactive change in cybersecurity research, technology and industrial development, we stand ready for hosting the Cybersecurity Industrial, Technology and Research Centre.