

A journey in the European Commission: from Medical Informatics to the Internet of Things

By Gérald Santucci

On 10 February 2026 – I will silently yet vibrantly celebrate the 40th anniversary of my taking office at Directorate-General XIII (now DG CONNECT) of the European Commission. Recruited as an expert by Giangaleazzo CAIROLI and Roland HÜBER, I had the opportunity to begin my work in one of the most fantastic teams of DG XIII – the RACE Division (later Directorate) in charge of bringing together the EU Telecom community to design, develop and implement so-called Integrated Broadband Communications (IBC). Actually, my specific role was to explore a RACE-based action on Bio-medical Informatics Collaborative European Programme and Strategy (BICEPS, *ça ne s'invente pas...*). We had a great leader, the late Roland HÜBER, to inspire and guide us towards the objective of getting approval by the Council of the renamed Advanced Informatics in Medicine (AIM) exploratory action (24 months, ECU20 million). Roland was admired and revered by his staff for his unique vision of the future of telecommunications, but also his tenacity, spirit, talent and uncompromising professional integrity. I was 31-34 years old, and I enjoyed an extraordinary period at work, marked also by the completion of the Single Market by 1992. Some of my professional memories of that time have been published in *La Revue de l'Association telecom Paris Alumni*, in an article entitled “Il était une fois le PCRDT: le cas spécifique du numérique” <https://www.telecom-paris-alumni.fr/fr/revue/numeros/europe-et-innovation/3579>

By the end of 1989, I was sufficiently perceptive to understand that the operational management of the AIM exploratory action should be put in the hands of a more experienced person who would definitely have to be a doctor in medicine. Thus came two successive outstanding heads of unit to fulfil the job: Niels ROSSING, from Denmark, and Jean-Claude HEALY, from France, both extraordinary professionals who showed the best leadership and skills, but also passion and purpose, and who all became great friends of mine. (In 1995, the late Jean-Claude was the godfather of one of my children.)

After AIM, during 10 years I gained experience in international telecom policy (with a focus on the GATT negotiations for semiconductors) and R&D management (the Telematics Applications Programme). When I became Head of Unit in May 1999, I had the chance to lead digital policy initiatives in a variety of domains from e-Government to Trust & Security to eBusiness to RFID & Internet of Things.

To be frank, by the mid-2000s I was getting bored with the management of the large unit (about 30 people) called “eBusiness and Networked Enterprise” – a lot of activity about programme and project management (calls for proposals, evaluations, contract preparation, financial commitments, payments, and so on) but little excitement due to the lack of new socioeconomic and policy challenges. After impromptu conversations with thoughtful and creative minds from industry and academia, I decided to launch a broad debate on all the aspects of Radio Frequency Identification (RFID).

A first phase, between March and June 2006, covered the organization of five workshops to assess the potential of RFID for business and society but also concerns about personal privacy and security. It is worth noting that the first workshop, “From RFID to the Internet of Things”, was actually visionary and the first event of that kind held ever in the European Commission. The workshops attracted wide interest from all stakeholders, including citizens, trade associations, and business representatives. They also gained recognition around the world as

several high-level experts and decision-makers from non-European third countries participated in the various panels, e.g., Vinton Cerf (Chief Internet Evangelist for Google), Dan Caprio (Chief Privacy Officer at US Commerce Department), Ken Sakamura (Professor in Information Science at the University of Tokyo).

The second phase from July until September 2006 was the launch of a public online consultation which the Commission expected to produce a wide consensus as to whether, and if so to what extent, Europe would need a conducive and stable policy environment encouraging all types of companies to invest in RFID technology and harmonizing technology standards as well as radio frequency allocation, while at the same time safeguarding individuals' privacy and security. This consultation attracted 2190 responses, which was considered at that time an overwhelming success for a technological topic.

The last phase was a conference in Brussels on 16 October 2006, attended by several EU leaders like Viviane Reding, Commissioner for Information Society and Media, and Catherine Trautmann, Member of the European Parliament. The goal was to present the main outcomes of the workshops and the online consultation to a large audience of experts and decision-makers. Then, the Commission reported on its assessment of the consultation initiatives and collected the final views of the stakeholders before producing a "Communication on Radio Frequency Identification (RFID) in Europe: steps towards a policy framework", COM(2007) 0096 final <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52007DC0096>, published on 15 March 2007.

At the end of the RFID Communication, I had included the following sentence: "*The Commission will continue to closely monitor the move towards the "Internet of Things", of which RFID is expected to be an important element.*" The idea of linking RFID and Internet of Things popped up following discussions I had already in 2005 with my DG INFSO colleague Bernard BARANI and Dr Lara SRIVASTAVA, lead author and editor of the famous ITU Internet Report on the Internet of Things (*Tagging things/RFID, Feeling things/Sensor technologies, Thinking things/Smart technologies, Shrinking things/Nonotechnology*).

Hectic work after the RFID Communication led to a Recommendation on RFID (12 May 2009) and a Communication on the Internet of Things (18 June 2009), but what I would like to focus on now is my role in the beginnings of the IoT Council and the IoTDay.

In the aftermath of four International Conferences on RFID and the Internet of Things – Berlin, Germany (25-26 June 2007), Lisbon, Portugal (15-16 November 2007), Zurich, Switzerland (26-28 March), Nice, France (6-7 October 2008), my unit led the preparation of a Communication on the Internet of Things, i.e. the one published on 18 June 2009 (https://ec.europa.eu/commission/presscorner/detail/en/ip_09_952), which covered a 14-point Action Plan including: governance; privacy and data protection; the right to the silence of the chips; emerging risks (trust, acceptance, security); vital resource; standardization; research; public-private partnership; innovation (pilot projects); institutional awareness; international dialogue; environment (recycling); statistics on the use of RFID technologies; evolution.

In the context of this work I met Rob van Kranenburg, initially to discuss the content and policy implications of his book "The Internet of Things: A critique of ambient technology and the all-seeing network of RFID", but quickly to have a continuing conversation about the longer-term evolution of the Internet of Things and its impact on Democracy, Society and the Planet. Rob and me were convinced that the future of the Internet of Things could not be left only in the hands of experts – because of its potential to build a new world, the debate on it had to involve

also the citizens. In 2009, Rob decided to form the IoT Council, in fact a thinktank open to all citizens willing to reflect and discuss the impact of the Internet of Things on all issues pertaining to the society. I strongly supported the idea which, for me, consisted in bringing together stakeholders from diverse backgrounds and perspectives, including industry, designers, technology tinkerers, artists, thinkers, philosophers, regulators, etc., to form a new community of people committed to sharing their Internet of Things visions and experiences. Like Rob, I thought it was vain to reject the Internet of Things as if it were a dangerous or unnecessary innovation – it was already there, and hence the intelligent thing to do was to harness the issues and drive them towards the best direction for humanity, people and the planet.

One year later, Rob put forward the idea of a global IoTDay, *“held annually and with a wide range of participants, growing to hundreds of locations across the world, with a variety of gatherings in places ranging from conference halls, online meetings, bars and cafes, Meetups, classrooms and parks.”* We laughed once by suggesting that the success of the IoTDay would be when our grandmothers would understand why the Internet of Things is important and would give us some clues as to how to make it useful in daily life!

I’d like to insist that as the founder of the IoT Council and the IoTDay, Rob has been at the forefront of shaping Europe’s IoT discourse since 2009, influencing both corporate strategy and government policy across sectors. It’s been an honor and privilege to make this IoT journey and continue it with him. His influence bridges technology, policy, and people, bringing unmatched authority to every initiative he takes or keynote presentation he makes. It is not by mere coincidence that the IoT Council is one of the Top 90 Best IoT Blogs and Websites in 2026 (source: FeedSpot https://bloggers.feedspot.com/iot_blogs/).

We are all glad that over the last fifteen years Rob has played such an important role in EU innovation by participating in flagship projects and giving audiences firsthand insights into the future of the Internet and Internet of Things. He is today a globally sought and respected voice on the Internet of Things, Smart Infrastructures, Artificial Intelligence, 6G, including the ethical, social, and policy dimensions of these emerging technologies. I’m sure he’s right to highlight the intimate synergy between IoT, AI and 6G.

My 32-year journey in the European Commission, with its ups and downs, its greatest glories (AIM, eGovernment, RFID/IoT) and its small failures (semiconductors, trust & security) reached a climax during the period 2008-2012 when, thanks to few people like Rob van Kranenburg, the Internet of Things moved from idea to reality, surpassing in resilience similar concepts like Ambient Intelligence, Industrial Internet, Pervasive Computing, Ubiquitous Networking, Cyber-Physical-Systems, Industry 4.0, and some more.

The theme of IoTDay 2026 is still open to ideas, but Kai Hackbarth, Head of Products and Solutions Europe at Bosch Software and Digital Solutions, has already set the perspective: *“While the ‘death of IoT’ is often debated, I believe we are seeing a massive rebirth. I’d love to see a focus on how we can make IoT more relevant again through the lens of AI and Digital Sovereignty. By combining AI-driven intelligence at the edge with a strong framework for data and infrastructure sovereignty, we can move from simple connectivity to truly resilient, autonomous systems. This feels like the right conversation for 2026!”*

I intend to be part of this conversation.

What about you?