



## **ACKNOWLEDGMENTS**

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Photography by Yves Fonck

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The opinions expressed in the case studies are those of the individual student teams, and do not necessarily reflect the views of Accenture, the College of Europe, the Lisbon Council, the Government Executive Innovation Circle or any of their associates.

# THE EUROPEAN CENTRE FOR GOVERNMENT TRANSFORMATION

The 21st century is a time of unprecedented challenge – and great opportunity.

The European Centre for Government Transformation strives to shape a high performing and innovative public sector, enabling the delivery of sustainable, modern and quality public services. It provides a unique and multi-stakeholder platform for constructive dialogue, exchange of best practices and formulation of innovative solutions. This network of frontline practitioners, change agents and thought leaders is complemented by ground-breaking research and analyses in an effort to shape and inform policy developments and the government of the future — a transformation in the way governments do business.

Founded in 2009 as a European research centre and practitioner-driven community, the European Centre for Government Transformation is dedicated to providing pragmatic and actionable solutions designed to help government agencies and other public service organisations improve the social. economic and health outcomes of the people they serve through delivery of increased and improved public services. It is a new kind of ideas and solutions hub that recognises the interdisciplinary nature of state transformation and public sector modernisation. Its three founding partners -Accenture, the College of Europe and the Lisbon Council - bring a broad range of experiences and knowledge to this fast-growing community, contributing expertise and guidance to the debates and ensuring broad dissemination for the ideas developed in these fora.





### **ACTIVITIES**

## Thematic High-Level Roundtables on

- Digital Diplomacy
- Tax and Revenue Collection in the Digital Age
- Smart Border Management
- Digital Government
- Employment and Skills
- Sustainable Public Finances
- Public Procurement

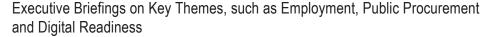
## Collaboration with the European Commission's Research and Innovation Directorate-General

- College of Europe Students State Transformation Case Studies Based on the Winners and Finalists of the European Capital of Innovation Award (iCapital Award) and the European Prize for Innovation in Public Administration (PIPA Prize)
- Roundtable on Public Sector Innovation
- Launch of the Final Report by the Expert Group on Public Sector Innovation
- Fringe Session on Public Sector Innovation at the Innovation Convention

### **Annual Government Transformation Summits and Award Ceremonies**



Landmark Publication *Delivering Public Service for the Future: How Europe Can Lead Public-Sector Transformation*, a unique collection of thoughtful essays on the future of public-sector reform and state modernisation by 12 of Europe's leading thinkers and policymakers.





Research Study *Driving Public Entrepreneurship: Government as a Catalyst for Innovation and Growth in Europe*, published in collaboration with Oxford Economics



Diplomacy in the Digital Age – A High-Level Roundtable for Government Executives

# COLLEGE OF EUROPE STUDENT CASE STUDIES: INTRODUCTION

## Tomorrow's Leaders Evaluate Today's Challenges

In 2017-2018, 12 students from the College of Europe were competitively selected to take part in a project on state transformation. They were divided into three teams of four students. Working together with Accenture, the staff and faculty of the College of Europe and the Lisbon Council, each team was asked to evaluate the challenges of a city, chosen among the winners and finalists of the European Capital of Innovation Award (iCapital Award), awarded by Carlos Moedas, European commissioner for research, science and innovation. The selected cities are Eindhoven, Stavanger and Torino. Each team visited the administration they were evaluating to learn about the particular challenges they faced, and ultimately help them better understand their public-sector challenges and improve their innovation strategies.

In completing this project, the students were coached by a team of top transformation managers at Accenture, the global management consultant firm, as well as by the Government Executive Innovation Circle, a European Centre for Government Transformation community committed to developing and implementing solutions to high-level state transformation challenges. Members of the Government Executive Innovation Circle met with the students in Brussels in February 2018, and later agreed to evaluate the case studies, awarding a prize to the best of them. The case studies were presented in Brussels in April 2018 at The 2018 Government Transformation Summit, in the presence of Paola Pisano, deputy mayor for innovation and smart city, City of Torino, Italy; Mary-Ann Schreurs, deputy mayor for innovation, design, culture and sustainable development, City of Eindhoven, The Netherlands; and Bjørg Tysdal Moe, deputy mayor for innovation and sustainability, Stavanger Municipality, Norway. On this occasion too, the winning College of Europe student team received The 2018 Public Sector Innovation Award.



## **GOVERNMENT EXECUTIVE INNOVATION CIRCLE**

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Director-General, Informatics European Commission

President, State Transformation Case Study Jury

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## **FOREWORDS**

## By Gertrud Ingestad

Director-General, Informatics European Commission

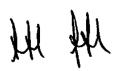
President, State Transformation Case Study Jury

As director-general for informatics at the European Commission, my job is on the one side to modernise the entire IT system of my own organisation and on the other side to build a network of public administrations in the member states, willing to embark on the journey of interoperability for their IT systems. The good news is that, compared to a few years back, today, we are shifting gears and there is a lot of appetite for change. I sense that administrations, including my own, are ready for a leapfrog that would facilitate their interaction with each other, with businesses and most importantly, with the citizens.

Because indeed, citizens of today and tomorrow. who are more and more accustomed to the free flow of information and services provided by digital tools, increasingly want - and deserve - a seamless way to communicate with their administrations, no matter the time it is and the place where they are located. They want 24/7 access to the services provided by the public administration, just as they have smooth access to services provided by the private sector. Against this backdrop, it becomes clear that public organisations must work hand in hand to make their systems and data – within the limits of the European privacy rules - interoperable. Interoperability is the best way to cross-border and cross-sector public services, which is the grand objective public administrations throughout Europe must achieve. And I am proud to say that ISA2, the European programme that supports the development of digital solutions that enable public administrations, businesses and citizens in Europe, is doing just this.

I am also proud to chair the jury of public-sector leaders who are evaluating authentic, hands-on state transformation case studies prepared by a dozen of College of Europe Master of Public Administration students within the framework of the European Centre for Government Transformation. These bright minds spend time throughout their academic year in Bruges to analyse in-depth real issues, which have a profound impact on citizens' lives. They think about realistic ways to solve the challenges they are facing, by proposing innovative ideas that can change the way administrations operate, and hence improve the delivery of public services to citizens, but also to the business community and the end users in general. The students deliver important messages to the civil servants we are and remind us that there are different angles to approach a dossier, that we should not restrict ourselves when it comes to finding solutions and that out-of-the-box thinking is crucial. This is what you will find in the three case studies unfolding in the next pages of this publication. I hope they will inspire you as much as they inspired me.

If those who are for now aspiring European leaders already believe in the power of modernising the administration to make it more aligned with the 21st century citizens' needs, I'm not only encouraged that what we are doing in the European, national and local administrations goes in the right direction, I'm hopeful that the change will actually happen.



## By Professor Olivier Costa

Director of Studies and Professor European Political and Governance Studies College of Europe



Three years ago, a group of students of the College of Europe came to see me at the end of the year to request the creation of a training on digital issues. They underlined the perspectives opened by the development of the Digital Single Market (DSM), the importance given to the issue by the new President of the Commission Jean-Claude Juncker, and their belief that this sector was the most promising in terms of professional perspectives. They convinced me. I first created a 'compact seminar' on the issue, that I later transformed in a full optional course, which attracted much attention from the students. Since then, I discover every week a new dimension of this fascinating topic, and the Commission is constantly underlining the potentialities opened by the full integration of markets in digital settings and by the use of new technologies in all kind of sectors. The DSM is indeed only one of the multiple aspects of the impact of new technologies on our economies and societies. The institutions of our political systems do not escape from that process.

The students involved in the European Centre for Government project have perfectly taken that evolution into account. It is striking to see that they all address their cases looking at the potentialities opened by digital technologies, be it the use of blockchain for the rollout of local public services in Torino, the participation of citizens in the delivery of smart lightening-based local public services in Eindhoven, or the co-creation with business actors across health and climate local public services in Stavanger. Digital technologies appear today as the most promising solution to a very vast range of problems faced by public authorities, at all level of governance. And we are certainly only witnessing the first steps of an incommensurable evolution.

Digital natives are certainly more capable than people of my generation to imagine the potentialities opened by digital technologies, especially in the transformation of public authorities and public services. The students' work on the three cases examined this year is an excellent illustration of that competence. This situation is quite logical, if we consider the interest that the European Centre for Government Transformation has always paid to new technologies and innovation. And I am very pleased to see how experts and high-level practitioners of local, national and European governance involved in the jury are capable to exchange with the new generation on the fascinating topic of the role of innovation for public services.

With the ongoing support of Accenture and the Lisbon Council, 12 students of the College of Europe's Political and Governance Department had once more the great privilege to work on public service reform projects that are being undertaken in three different European countries. They have enjoyed advice and training of high-level professionals who were most generous and accommodating in giving of their time and sharing their insights.

The College of Europe, which has been preparing young Europeans for leadership functions since 1949, in both private and public sectors, is most grateful to Accenture and the Lisbon Council for such opportunity. We are also very proud of our students who worked on their projects on top of a highly demanding study programme at the College. They have, one more time, shown that it is possible to support the European conception of public services by creative thinking. We hope that their analyses and proposals will be valuable contributions to this end.





By Bernard Le Masson Global Managing Director Public Service. Accenture

Government as a platform mirrors the digital revolution which was initially triggered by the digital darlings (Alibaba, Popmyday, Deliveroo...) challenging traditional industry business models through platforms. Acting as intermediaries, these platforms are orchestrating an ecosystem of stakeholders through facilitating collaboration, connecting people and businesses to innovative digital services and; above all allocating available resources to meet unfulfilled constituencies' needs to deliver social and economic outcomes, which ultimately leads to economic and sustainable growth.

Embracing disruptive platform model has now also become a tangible reality for public administrations across Europe to co-deliver digital and innovative public services with citizens, businesses and the third sector at its heart. Implementing it into practice is precisely the public goal of three forerunners European cities - Eindhoven in the Netherlands, Stavanger in Norway and Torino in Italy - well decided to harness it.

In Eindhoven which has innovation, design and high tech in its DNA, the objective is to create smart grids across public spaces, such as connected LED street lighting, aiming at fostering new interactive services such as guiding emergency services or alerting on suspect sounds (breaking glass) through a quadruple helix approach aiming at involving residents, researchers, businesses and local government. In Stavanger, well-known as paving the way in terms of smart cities, the aim is to set-up sustainable partnerships among local businesses and public actors to co-implement innovative services at the crossroad of healthcare and climate through unleashing the use of public data. In Torino, a post-industrial hub strongly committed to foster open innovation, the ambition is to implement blockchain technologies to secure and facilitate social payments, such as scholarships, and by doing so tackling financial loss.

In the light of those local public services innovation pilots there is a strong appetite to address the transformational digital challenges which each government is nowadays facing. Indeed, co-creating and co-delivering public services at speed which meet growing and constantly changing constituencies' expectations while coping with tighter digital requirements are the new imperatives which public administrations need to undertake. The question is no more about why and when starting this digital transformational journey to embrace the *Government as a platform*'s mode but rather about *what* types of services should in priority be digitally transformed and *how* to seize this opportunity in a most efficient way.

To respond to these challenges, the European Center for Government Transformation is more than ever committed to turn visionary ideas into concrete actions, objectives into outcomes, skill-up talents and, scale digital transformation to adapt European public services to the widespread digital trends experimented, on a daily basis, by citizens and businesses as consumers of digital services. Accenture is also strongly devoted to support the empowerment of cities with the design and rollout of digital strategies to enable agile operations, achieve smarter e-decision-making and, relevant delivery of digital services ultimately leading to create sustainable, social and economic value expected by citizens, businesses and the third sector across Europe.

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## **By Paul Hofheinz**President and Co-Founder, The Lisbon Council



Today, unlike a decade ago, the public sector is overflown with modernisation initiatives. At the European level, the eGovernment Action Plan, launched in 2016, is the strategy to accelerate the digital transformation of governments; the recently signed Tallinn Declaration on Digital Government is a strong signal of commitments by the member states to upgrade their administrations to face the challenges and opportunities of the 21st century; and at the local level, cities have rapidly become the testbeds for the implementation of innovative solutions which improve the delivery of public services to the end users.

But other parts of the world are raising their game too. Chile wants to become the new e-Estonia. India has the ambition to transform its governance thanks to real time communication with its citizens via the Transforming India platform. Singapore develops incredible solutions to skill and retrain its labour force via the Skillsfuture national programme. And these are only a few examples showing that the competition is dramatically intensifying at the international level. If they want to remain in the pole position and be the standards setters in this game, Europeans should keep raising their game too. It means not to be afraid of testing new digital government solutions, being self-critical, failing fast, improving one's initiatives and sharing best practices.

The European Centre for Government Transformation, which I, at the Lisbon Council, had the pleasure and privilege of co-founding nine years ago with friends and colleagues at Accenture and the College of Europe, was created to put squarely the issue of state transformation on top of the policy agenda and to create a network of pioneering public-sector agents who are determined to innovate and modernise their administrations. Looking at all these initiatives - from Europe and other parts of the world - now makes me think that, somehow, a project that was ahead of its time almost a decade ago is today more relevant than ever. And if it has achieved anything on the policy side, this is indeed thanks to its human component, the network of tireless civil servants who believe that not only the private sector can innovate, but the public sector, one of Europe's main features, can – and should – too.

And when it comes to people, I'm not talking only about the current public-sector leaders, but also the upcoming ones. One key pillar of the European Centre for Government Transformation is the work we do with the College of Europe students from the political and governance study department, who work on state transformation case studies with European cities throughout their academic year in Bruges. As of today, more than 100 aspiring European leaders participated in the programme. They care about a dynamic, smart and citizen-oriented public sector and dedicate some of their time at the College of Europe to deepening their knowledge about a challenge faced by a European city and to proposing creative solutions that would catapult the city to the top tier of public sector innovators in Europe. I want to thank them for their indefatigable research, analysis, fresh solutions and excellent presentations. Their work is the future.

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# CASE STUDIES

How can the Torino City Council pilot and finance a local public service using blockchain through existing EU funding and strategic initiatives?

How can the Eindhoven City Council implement a public campaign for quicker adoption of smart lighting?

How can the City Council of Stavanger manage health and mobility more efficiently to boost sustainable growth?



CASE STUDY

# BLOCKCHAIN IN LOCAL PUBLIC SERVICE

#### **Clients**

Torino City Council, Italy

## **Objective**

How can the Torino City Council pilot and finance local public services using blockchain through existing EU funding and strategic initiatives?

#### **Team**

Théo Aphecetche (FR), Lana Tomic (HR), Anne-Mailihn Vasseux (FR) and Lise Wilhelmsen (DK)



## **EXECUTIVE SUMMARY**

Torino's City Council is looking into new ways of innovating the public services: they have chosen the blockchain technology as one of the tools. It is the ability of the technology to store, distribute and protect public records, and simplify the interactions between public service and citizens that have raised the interest of the public administration. Considering the City's budgetary constraints, the business challenge addresses how the City Council can pilot and finance local public services using blockchain through existing EU funding and strategic initiatives.

## Recommendations

The City Council runs the Municipal Register of Buildings. A blockchain-based registration system can bring comprehensive knowledge of the territory and help tackle tax evasion. The recommendations for the implementation of the reform are manifold and should follow a timeline, to secure efficiency.

The necessary pre-conditions:

- The reform needs to be implemented through management: the divisions of financial resources, area tributes and real estate agency, real estate service and set tax service, and urban and territory need to understand how the technology works and the benefits of such a reform.
- Good coordination and new working habits will be required and should be perceived as positive: including the different divisions in each step of the reform process, a common understanding of the technology is achieved.

## A series of steps need to be taken within the next six months to one-year time.

Six-twelve months:

- 1. Launch a public consultation with the citizens of Torino regarding presenting the scenario of a digital land registration process. This should be done to get the citizens' opinion on the blockchain-based process and how it would affect their level of trust in the process. The second reason is to understand the steps that should be taken to ensure the usability of the technology for citizens, e.g. via informational events. Thus, making sure that the project will not be dropped throughout the process, as are the talks in Sweden.
- 2. Upgrading the knowledge. There is a network of developers in Torino, with interest in blockchain. However, they either lack expertise and/or time. As a first step in implementing this recommendation, the Council recently set the task-force. Sweden secured by resorting to the startup ChromaWay.
- Launch a public competition as all three cases studied in the benchmark are relying on private startups, which is why we recommend the City Council to reach out to such startups.

## Funding:

There are currently multiple possibilities for the EU funding. The Council is applying to the first call, according to our recommendation. There will be another round of the same call ('New forms of delivering public goods and inclusive public services') of the Horizon2020 scheme. Furthermore, both the European Regional Development Fund and the European Fund for Strategic Investments offer funding under themes of which the blockchain technology can be located. Applications should focus on the expected benefits of efficiency and transparency and the multiple public and private actors involved in the process and the project, as its implementation will allow these to easier work together.





CASE STUDY

## **USERS' ENGAGEMENT STRATEGY**

#### **Clients**

Eindhoven City Council, the Netherlands

## **Objective**

How can the Eindhoven City Council implement a public campaign for quicker adoption of smart lighting?

#### Team

Gaston Bricout (FR), Valentin Coutouly (FR), Ann-Sophie Vermeersch (BE) and Delphine Joos (BE)



## **EXECUTIVE SUMMARY**

The City of Eindhoven is known worldwide for its projects revolving around lighting. In 2012, the City presented a *Vision and Roadmap for Urban Lighting* where it displayed an ambitious project, based on innovative services in the public lighting grid.

To achieve this project, the City Council decided to implement a "Quadruple Helix" approach, in which four partners are cooperating on the project:

- A government partner: the City Administration of Eindhoven,
- A business partner: a consortium of two companies, Philips Lighting and Heijmans Construction,
- An academic partner: the Technological University of Eindhoven,
- A civil society partner: the end users of the grid, citizens and businesses.

However, this approach suffered from multiple drawbacks in the last two years. Despite the opening of two living labs, the City and the consortium have issues mobilising and understanding the needs of the end users. Furthermore, the Quadruple Helix's different partners also have difficulties understanding each other's motives and goals.

Our business challenge focuses therefore on three main elements:

- An End Users' Participation Strategy in order to efficiently reach and connect with end users,
- An End Users' Interaction Evaluation to identify the end users' needs and implement them,
- A Project Management and Communication improvement in order for all partners to work with each other better.

With our results, we recommend the following actions to Eindhoven:

## On End Users' Participation Strategy

Current living labs and other offline events should be coupled with a new social media and communication strategy, using a new ICT-mediated participation platform, such as the one successfully implemented in Barcelona for almost two years. In addition to the current "catch-all" strategy, targeted events for specific situations should be implemented. The city could also consider public-private partnerships for funding.

## On End Users' Interaction Evaluation

Evaluation should be done *ex ante*, to get to know the end users' needs or inspire them with examples and peers' information; and *ex post*, with a quality cycle strategy to evaluate objectives and outcomes. For a research project in Helsinki, the division of an issue between citizen groups improved the quality of their responses. The current open data policy also needs to be developed and advertised among city services and partners.

# On Project Management and Communication

The internal structure of the project has to be reconsidered, with the installation of a neutral mediator between partners and a dedicated service for the project inside the city administration. The reorganisation of the city administration of Liège allowed their participation platform to be efficiently managed.

Furthermore, all of the recommendations should be implemented gradually to ensure a smooth process, able to be scaled-up and replicated.

These recommendations can be implemented using the following roadmap:

## 3 months

- New ICT-mediated participation platform [100k€/year with dedicated city service]
- Identify end users' needs

## 6 months

- Combination of online and offline events with dedicated project managers [40k€/pers.]
- New strategy for social media and external communication [60k€ with city service or external consultancy]

### 12 months

- Set up targeted events for specific situations
- Implementation of a city service with transversal input from stakeholders and responsible for the platform [100k€/year]

Indicative total cost (over 12 months): 248k€

By following these advices, the City of Eindhoven will be able to convert its current good starting point into a more efficient project, to realize its *Vision* in the long term, and to reconnect with its citizens.





CASE STUDY

## **GOVERNMENT AS A PLATFORM**

#### Clients

Stavanger City Council, Norway

## **Objective**

How can the City Council of Stavanger manage health and mobility more efficiently to boost sustainable growth?

#### **Team**

Marta Domínguez (ES), Ekaterina Frolova (RU), Carlos Gil Soriano (ES) and Chinazo Mogbana (BE/NG)



## **EXECUTIVE SUMMARY**

## Government as a Platform, Stavanger

Over 90% of current data was created in the last two years, while unstructured data analytics tools grow. The confluence of these two facts has created immeasurable opportunities harnessing this power to optimise processes. As a Smart City and Lighthouse City (Triangulum project), Stavanger must take the provision of public services to the next level- optimising vehicle flows through smart traffic lights and using big data analysis to forecast medical demand, with machine learning technologies constantly refining both.

# From Economic Decline to a Commitment to Innovation

Previously Europe's energy capital, Stavanger suffered the 2014 oil collapse, experiencing unprecedented unemployment. It further faces looming demographic challenges and air quality issues.

Anticipating the economic fallout, Stavanger saw an investment in innovation as the path to recovery. It is known for its innovative clusters and public procurement experience, as well as its history of Triple Helix (academia-government-industry) cooperation. However, the City Council has struggled to obtain tangible returns from previous partnerships.

## **Challenge Moving Forward**

Given this state of play, the challenge lies in developing projects that allow Stavanger to boost growth through co-creation with businesses for health and climate services provision, the two areas where improvement is most pressing and would have the greatest economic and social impact.

In-depth analysis of the city and extensive interviews with public, private and academic stakeholders permitted the identification of the City Council's strengths, weaknesses, opportunities and threats surrounding the main challenge. Key takeaways included the prominence of traffic in local greenhouse gas emissions (70%) and the fragmented and unintegrated nature of health services, hindering efficiency. Benchmark analysis tested preliminary hypotheses against cities with the most innovative solutions in Europe- London, Kolding, Paris, Tallinn, Barcelona.

# Smart Traffic Management Recommendation

Greenhouse gases can be significantly reduced by managing transport through smart traffic lights with energy-efficient lightbulbs, providing opportunities for co-creation with private and academic partners and reducing economic loss from poor mobility. A developed software, constantly refined by machine learning technologies, would allow the

City Council to centrally coordinate traffic lights, optimising vehicle flows. This was proven successful in London, where a public-private partnership developed 'SCOOT'. Environmentally friendly and cost-efficient LED lightbulbs would complement these traffic lights. Implementation of a pilot version should be possible within 12 months.

# Big Data in Health Services Recommendation

A digital platform that shares and analyses raw data, producing actionable knowledge, provides the most potential for the City Council to develop efficient, timely health services. This requires Big Data analysis tools enhanced by Machine Learning. Stavanger University's Centre for IP-based service innovation has first-rate capabilities to develop these, providing an excellent partner. Results in Tallinn demonstrate this system's potential. Implementation should take place in two 6-month phases. Care was taken to ensure this recommendation is fully compliant with incoming GDPR regulation.

## A Bright and Innovative Future

These innovative, actionable solutions provide an excellent platform for future profitable co-creation for the City Council, paving the way for Stavanger's rise to the forefront of innovation and economic prosperity.



## ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world's largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With more than 435,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

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## ABOUT THE COLLEGE OF EUROPE

The College of Europe, founded in 1949 and based in Bruges (Belgium) and Natolin (Warsaw, Poland) was the first and is one of the most reputed institutes of European postgraduate studies, which prepares annually up to 400 students from over 55 countries to work and live in an international environment. The European Political and Governance Studies programme offers a wide range of courses on the functioning and policies of the European Union. In 2015, it launched a new option devoted to "European Public Policy Analysis." Its home page is www.coleurope.eu.





## ABOUT THE LISBON COUNCIL

The Lisbon Council is a Brussels-based think tank and policy network committed to making a positive contribution by engaging political leaders and the public-at-large in a constructive exchange about the economic and social challenges of the 21st century. Incorporated in Belgium as an independent, non-profit and non-partisan association, the Lisbon Council is among Europe's most authoritative and thoughtful voices on economic modernisation and social renewal. Its home page is www.lisboncouncil.net.





