# TIMES

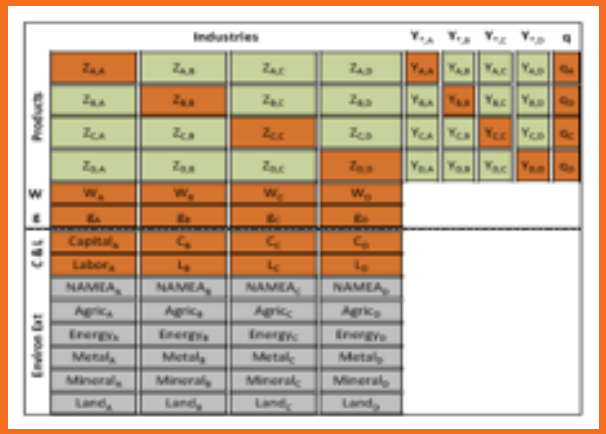
## Main objectives

**the TIMES project aims giving the same equality of chance:**

- to each territory at each level to design its **smartest open roadmap**
- to each scientific e-team to design its **smartest open responsible innovation**
- to each scientific e-team to design the **best predictions for the roadmaps**
- to each one for his/her **smartest professional path in territorial intelligence**

**Each above task has its own ecosystem inside the TIMES project**

Along the 2030 UN Agenda, "smart" means **"smart EE MRIO" matrix**
**(Environmental Extended Multi-Regional Input/Output)**
defining a **smart territory or innovation**




United Nations Educational, Scientific and Cultural Organization
uniTwin
COMPLEX SYSTEMS DIGITAL CAMPUS

## UniTwin UNESCO CS-DC

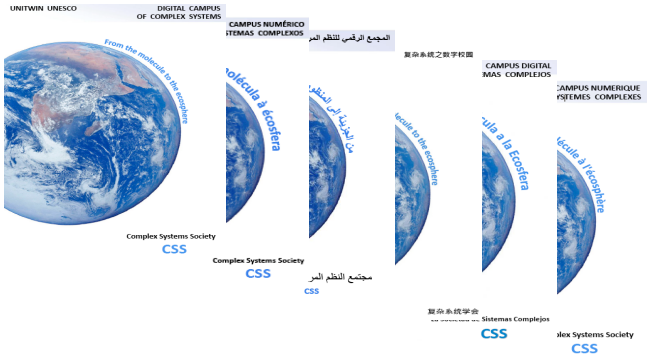
### Complex Systems Digital Campus

### cs-dc.org & cs-dc-15.org

**Main objective:** sharing all the resources for research and education on complex systems, including the roadmap and the b ig data for their theoretical and experimental studies.

The CS-DC is a UNESCO UniTwin ("Universities Twinning") of more than hundred universities in all continents. Its Cooperation Programme signed with UNESCO are the creation of:

- a Social Intelligent Roadmap ecosystem for sharing all resources
- a Computional ecosystem for the "best" multilevel modelling given big data
- an Educational ecosystem for open lifelong personalized education




## TIMES Flagship of CS-DC

### cs-dc.org

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- Denise Pumain, University Paris 1, pumain@parisgeo.cnrs.fr
- Sander Van Der Leeuw, Arizona State University, vanderle@asu.edu

**Next events:**
- CCS'16, Conference on Complex Systems, Amterdam - Satellite meeting
- COP22- Summit, Marrakech November 2016
- the Open Governement Partership summit

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## TERRITORIAL INTELLIGENCE FOR MULTILEVEL EQUITY AND SUSTAINABILITY

From smart households & farms
to the smart world
**within**
**Knowledge society**

in relation with
- the **COP22 – Summit** of Marrakech Nov 2016
- the **Open Government Partnership - Summit** of Paris Dec 2016

# TIMES

From **SEEA System of Environmental Economic Accounting** introducing the 17 UN goals of 2030 United Nations' Agenda


to the **"smart EE MRIO" matrix**


## Smart world within Knowledge society

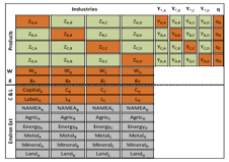
- Smart Household
- Smart Farm
- Smart Village
- Smart Country
- **TIMES**
- Smart Fabrik
- Smart Region
- Smart City
- Smart Building

## *HOW to do « Multilevel Open Governance »?*

Creating a **S**calable **M**ultilevel **O**pen **G**overnance ecosystem

Open governance e-team
**Smarter open territorial roadmap**

**SMOG**



Open governance e-sub-team
**Smarter open territorial sub-roadmap**

**the SMOG ecosystem gives** the same equality of chance to each territory to design its smartest open roadmap by:

- a bottom-up open government partnership with all its societal actors. Its actors are designing together their best roadmap and are together self-fulfilling it with the help of the open responsible innovations of the WORI ecosystem below.
- a top-down use of the trustable & coherent predictions of the WOPP ecosystem below. The remaining quantified uncertainty is at the hart of the compromise between exploration and exploitation, the main deal of any adaptive system.

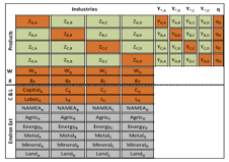
The SMOG ecosystem will organize each year championship with prizes where each open government will attribute prizes to its smartest territory.

## *HOW to do « Open Responsible Innovations »?*

Creating a **W**orldwide **O**pen **R**esponsible **I**nnovation ecosystem

Open governance e-team
**Smarter open territorial roadmap**

**WORI**



Worldwide interdisciplinary e-team
**Smarter open responsible innovation**

**The WORI ecosystem allows:**

- any territory at any level to submit its proposed open innovations for the challenges of its roadmap with the best chance of success
- local or, if necessary, worldwide interdisciplinary scientific e-teams to validate or invent and certify a smarter open responsible innovations

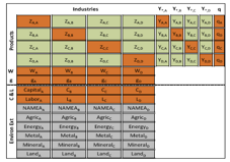
The WORI ecosystem will organize each year championship with prizes for the smartest open responsible innovation in each category at each territorial level.

## *HOW to do the best predictions?*

Creating a **W**orldwide **O**pen **P**robabilistic **P**rediction ecosystem

Open governance e-team
**Smarter open territorial roadmap**

**WOPP**



Worldwide interdisciplinary e-team
**Best open probabilistic predictions**

**The WOPP ecosystem:**

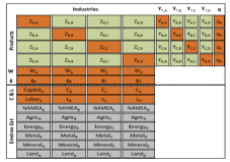
- is implementing the recent 2nd internet revolution and blockchain for providing honesty and trust, traceability and historicisation to the SMOG big data about EE MRIO matrices of smart territories. The smart economy will use more and more the 2nd internet revolution for sharing big data with smart territories.
- is using this trustable big data through deep learning methods for producing trustable & coherent predictions for the smartest possible multilevel roadmaps. The remaining uncertainty of the probabilistic predictions can be quantified: such uncertainty is at the hart of the compromise between exploration and exploitation, the main deal of any adaptive system.

## *HOW to do Education for a Smart World?*

Creating a **P**ersonalized **O**pen **L**ifelong **E**ducation ecosystem

Co-learning e-team
**Smartest professional path**

**POLE**



Worldwide interdisciplinary e-team
**Creating multi-linguistic MOOCs**

**The POLE ecosystem provides:**

- same equality of chance to each one to invent his/her smartest educational and professional path inside the TIMES Knowledge Map with the multi-linguistic MOOCs (Massively Online Open Courses) created by interdisciplinary e-team
- best recommendations to each new personalized path using deep learning on all the previous personalized paths as well as personal tutors.

The POLE ecosystem will organize each year championship with prizes for the best MOOC at each territorial level and the smartest professional path.