



**MAGIC (Moving Towards Adaptive
Governance in Complexity: Informing
Nexus Security)**

MuSIASEM Training

5 – 9 September 2016

MAGIC
NEXUS

ICTA-ICP building, UAB Campus de Bellaterra, Barcelona

Day 1 – Monday 5 September 2016

09.00-09.30 Welcome and introduction to the MuSIASEM training week (Mario Giampietro)

09.30-10.30 *Session 1A – What can we do with MuSIASEM?* *Quantitative Story Telling applied to the 2012/27/Eu directive on “Energy Efficiency”. (Mario Giampietro)

10.30-11.00 Coffee break

11.00-13.30 *Session 1B – Illustrating the basic concepts and answering questions:* (Mario Giampietro)

- *The representation of metabolic systems: Flows and Funds (definitions);
- *The metabolic patterns of Societal-Ecological Systems;
- *Taxonomy of categories of accounting (organization of functions) and associated Lexicon (characterization of available structural elements) – for funds (human activity, land uses, power capacity) and flows (energy, food, water);
- *QST: Checking desirability, viability and feasibility using narratives relevant for different story-tellers.

***The MuSIASEM 2.0 toolkits.**

Relational analysis; The MuSIASEM 2.0 (end-use matrix, environmental impact matrix, and externalization matrix); The processor approach – identifying and scaling patterns

13.30-15.00 Lunch break

15.00-15.30 *Session 1C* Presentation of the pre-analytical steps & engagement of the extended peer community (policy and innovation stakeholders) to be operationalised across WP4, 5 & 6 (Kerry Waylen and Thomas Völker)

15.30-18.00 Reflections on the implications of PNS for MAGIC (Roger Strand)

Day 2 – Tuesday 6 September

09.00-11.00 *Session 2A “From regional to sectoral” - Application of the MuSIASEM toolkit at the sectoral level:* (Tarik Serrano)

***The dairy sector case study.**

Focus on the use of processors for scaling and connecting processes, and application of the MuSIASEM toolkit - 30 min presentation, 30 min discussion;

Exploring the possibility of applying the DPSIR approach for Quantitative Story-Telling – discussion 30 min;

11.00-11.30 Coffee break

11.30-13.00 *Session 2A “From local to regional” - Application of the MuSIASEM toolkit at the regional and local level:* (Violeta Cabello)

***The desalination by renewable energy for a farm in the Canary Islands.**

Focus on the processor concept, and the water-energy nexus - 30 min presentation, 30 min discussion;

*** Water Framework Directive in Almeria.**

Focus on the application of grammars, water-food nexus (check incoherence between policies) and socio-ecological patterns (environmental impact of intensive food production) - 30 min presentation, 30 min discussion;

13.00-13.30 *Session 2C – Back to theoretical discussion about MuSIASEM* asking and answering questions about theoretical concepts

13.30-15.00 Lunch break

15.00–17.30 Work in groups (in parallel):

Discussion and problematization of the underlying assumptions required to implement the analytical tools and development of the content of selected case studies

Day 3 – Wednesday 7 September

09.00-11.00 Session 3A “From national to EU” - Application of the MuSIASEM toolkit at the national/member-state level: (Zora Kovacic)

***The Spanish case study**

Focus on the application of the MuSIASEM tool kit (end-use matrix, Sudoku effect, environmental impact matrix, and externalization matrix) - 30 min presentation, 45 min discussion;

Exploring the possibility of applying the Driving Forces, Pressures, States, Impacts and Responses (DPSIR) approach for Quantitative Story-Telling – discussion 45 min;

11.00-11.30 Coffee break

11.30-13.30 Session 3B “From EU to global” - Application of the MuSIASEM toolkit at the Global Level: (Mario Giampietro)

***Analysis of planetary boundaries**

Focus on the severity of external constraints (feasibility) when considering the global level - 30 min presentation, 45 min discussion;

Exploring the possibility of applying the DPSIR approach for Quantitative Story-Telling – discussion 45 min;

13.30-15.00 Lunch break

15.00–17.30 Work in groups (in parallel):

Discussion and problematization of the underlying assumptions required to implement the analytical tools and development of the content of selected case studies.

20.00 Social dinner

Dinner at Restaturant Braseria “La Bolera”, Baixada de L’Alba 20, Sant Cugat del Vallès (meeting point at 19h45 at Plaça d’Octavià in front of the Monastery of Sant Cugat).

Day 4 – Thursday 8 September

09.00-11.00 Presentation of the results of working groups and discussion.

11.00-11.30 Coffee break

11.30–13.30 Discussion of the main issues emerged in the working-group activities and implications for the framing of the initial set of QST in WP4.

13.30-15.00 Lunch break

15.00-17.30 Parallel sessions:

- * Envisioning the operationalisation of QST across WP4 to WP5, and WP6 in relation to the activities of the Nexus Dialogue Space, Nexus Information Space and the Knowledge Hub;
- * Institutional analysis aspects of QST.

Day 5 – Friday 9 September

09.00-11.00 *Session 5A:* Plenary discussion – “Wrapping-up” policy relevance of proposed analytical tools for QST.

11.00-11.30 Coffee break

11.30–13.30 *Session 5B:* Plenary discussion - Organization of the future work in a work plan for the forthcoming months (videos and other material to be prepared).

13.30-15.00 Lunch break

15.00–17.30 Discussion by groups - Organization of the future work agreeing a detailed work plan for the forthcoming months (videos and other material to be prepared, *doku-wiki*/knowledge hub, the metadata repository, etc.)



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