Moscow, Russia
June 4th, 2009

IFAC TC 5.3: ENTERPRISE INTEGRATION AND NETWORKING

Chair: Prof. Hervé Panetto
(Nancy-University, France)

Vice-Chair: Dr. Lawrence Whitman (Tentative)
(Wichita State University, USA)
Vice-Chair: from Industry

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Previous meeting

- IFAC World Congress'2008, Seoul, South Korea

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Agenda

- TC objectives
- Past and Current Activities
- Working groups (rules, duties, current ones)
- Next Activities
- Sessions at INCOM2009
- TC membership
- Other Businesses

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Scientific Objectives

- Investigates Collaborative Networked Organizations principles, working models, application methods, protocols and Information Communication and Technologies.
- Investigates reference models, modelling methodologies and tools for enterprise networks design and implementation.
- Investigates the possibilities of a Unified Enterprise Modelling Language to support the exchange of enterprise models among various user communities and modelling tools.
- Investigates theories, models and tools to verify and validate enterprise models.
- Investigates methodologies and technologies for documenting and storing enterprise models enabling model reuse.
- Investigates ontology services for semantics enrichment of enterprise models

TC data

- **41 members**
  - New Nominated from NMOs
  - A few resigned (not available, retired)
- **Not all members are active!**
- Web site: http://www.ifac-tc53.org
- Mailing list: ifactc53@ml.free.fr
- Plaxo Group: http://ifac-tc53.plaxogroups.com
- Live discussion chat group: http://ifac-tc53.groups.live.com

TC Working Groups

- The objective of a working group is to sustain a research domain
  - Define the foundation of a domain
  - Organise (Web)meetings
  - Organise or co-sponsor an international workshop or organise a session in conferences co-sponsored by the TC
  - Organise a special issue of a journal

WG 1: Collaborative Networked Organisations

Coordinator: Arturo Molina (to be changed)

- Research challenges
  - To achieve concurrency in all operations
  - To "instantaneously" transform information gathered from a vast array of diverse sources into useful knowledge for making effective decisions
  - To reconfigure manufacturing enterprises rapidly in response to changing needs and opportunities.
- Layers of relevance
  - Business, Knowledge, Application, ICT

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WG2: Unified Enterprise Modelling Language for Interoperability

Coordinator: Hervé Panetto (to be changed)

- Research challenge
    - To "instantaneously" transform information gathered from a vast array of diverse sources into useful knowledge for making effective decisions
    - To reconfigure manufacturing enterprises rapidly in response to changing needs and opportunities.
- Layers of relevance
    - Knowledge, Application

WG3: Enterprise Architectures and Reference Models

Coordinator: David Chen (?)

- ## Research challenge
  - To reconfigure manufacturing enterprises rapidly in response to changing needs and opportunities.

- ## Layers of relevance
  - Business, Knowledge

WG4: Enterprise Models Verification, Validation & Accreditation

Coordinator: Vincent Chapurlat

- Research challenge
  - To integrate human and technical resources to enhance workforce performance and satisfaction
  - To "instantaneously" transform information gathered from a vast array of diverse sources into useful knowledge for making effective decisions

- Layers of relevance
  - Knowledge, Application, ICT

WG5: Enterprise Models Repository

<u>Coordinator</u>: Lawrence Whitman

- Research challenge
  - To integrate human and technical resources to enhance workforce performance and satisfaction
  - To "instantaneously" transform information gathered from a vast array of diverse sources into useful knowledge for making effective decisions

- Layers of relevance
  - Business, Knowledge, Application

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Working groups

- Should we continue the current working groups ?

- Any other working groups replacing some of the existing ones?

- WG coordinators must write and disseminate a WG master plan for the trienium : scientific objectives and activities

- Call for partipipants

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Working groups (plan for the trienium)

- Objectives, challenge, relevance
- Membership (call for participation)
- An international journal
  - Papers
  - Session issue
- A workshop?

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Past and Current Activities (1)

- Conferences co-sponsorship, workshops and sessions support and organisation
  - IWL'2008: 1st IFAC/ACCA International Workshop on Logistics (Santiago (Chile)
  - EI2N'2008: 3rd IFAC/IFIP International Workshop on Enterprise Integration, Interoperability and Networking (Monterrey, Mexico)
  - INCOM'2009: 13th IFAC Symposium on Information Control Problems in Manufacturing (Moscow, Russia)

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Past and Current Activities (2)

- Special issues of Journals
  - Special issue of Computers in Industry on Enterprise Integration and Interoperability in Manufacturing Systems, **59/7,** September 2008
  - Special issue of Computers in Industry on Integration and Information in Networked Enterprises, fall 2009
  - Special issue of another international journal with extended version of papers from INCOM2009 track and EI2N workshop

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Next Activities (1)

- Conferences co-sponsorship, workshops and sessions
  - IFAC/IFIP ICEIMT Workshop at ICE on Interoperability and Next Generation Enterprise Architecture
  - EI2N'2009: 4th IFAC/IFIP International Workshop on Enterprise Integration, Interoperability and Networking (Vilamoura (Portugal)
  - ICEIMT Conference (Bled, Slovenia), December 14-16, 2009
  - 10th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems, *HMS 2010*. *Valenciennes*, France, 31 August – 03 September

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Next Activities (2)

- A major IFAC conference for the TC
  - CEA ? ICEIMT ?
- Special issues of Journals
  - IFAC Journals (ARC)
  - CII, IJCIM, JIM, EIS, IJPR, IJPE, IS (Which are your reference journals?)
- The TC should disseminate, on the web site, the list of journal (with impact factors) where they are publishing
  - Send to Lawrence Whitman, before July 15th, the list (journal name, journal web site, impact factor, topics, list of your references ...)
- How to strengthen the research collaboration between TC members
  - Students and faculty exchange (ERASMUS, Marie-Curie, PHC, in Europe, other programs (Mexitec, Brasitec, NSF, CSC, Ambassies ... with other continents, ...
  - CampusFrance catalogue of grants: http://www.campusfrance.org/fr/d-catalogue/campusbourse/cfbourse/index.html#

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Sessions at INCOM'2009

- 1 track (4 sessions – 26 submissions/16 accepted papers – A special issue of a journal)
  - Acceptance rate: 61% - 16 countries
  - INCOM'2009 acceptance rate: 64%

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TC membership

- We need (active) industry representatives

Other Businesses

- **TC Web site**
  - http://www.ifac-tc53.org
    - Webmaster: L. Whitman, who else?
    - Do we need a shared document repository?
- **IFAC TC 5.3 Plaxo group (to share links, information, …)**
- **TC mailing list (ifactc53@ml.free.fr)**
- **WG online chat spaces**
- **Where are you storing your papers'repositories?**
  - In France: http://hal.ccsd.cnrs.fr

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