EU – India Cooperation Platform in Future Internet & Electronic Media project

(shortname: FI-MEDIA)

Call Reference: EuropeAid/135-474/DD/ACT/IN

Project funded by the Delegation of the European Commission to India

NEM 20TH GENERAL ASSEMBLY, 15 OCTOBER 2015

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Industry Support

Confederation of Indian Industry
FICCI
Federation of Indian Chambers of Commerce and Industry
New European Media
Background of call and project type

Europe Aid/135-474/DD/ACT/IN: EU-India Research and Innovation Partnership

Restricted call for EU – India industry collaborations in the following 6 lots:

(i) Environment
(ii) Biotechnology
(iii) Transport
(iv) Energy
(v) Health
(vi) **Information and Communication Technologies**

Indicative allocation of funds by lot: EUR 333 333.

Project duration: 48 months
Objectives

1. **Scoping and selecting topics** out of Future Internet and Electronic Media (FI-MEDIA) for *Clustering between EU and India*;

2. **Facilitating** the formation of R & I Clusters comprising of the Research & Industry/entrepreneur communities;

3. **Establishing** **Cluster to Cluster (C2C) partnerships** in selected FI – Media topics;

4. **Mobility** of the Clusters for deeper mutual appreciation and improving sustainability of partnership.

5. **Visibility, exploitation, and sustainability.**
What is a cluster-to-cluster partnership?

**Cluster** = A closed group of Research & Industry Elements who have agreed to work closely on a selected FI-Media topic

**C2C Partnership** = Partnership of clusters from India with similar Cluster from Europe held together by working on the same FI-Media topic for cooperation
Our approach:

Identify hot FI-MEDIA topics for clustering

Mapping India-EU landscape

Form cluster to cluster partnerships
Activities Planned

1. **Setting up of Coordination platform**, including web portal, advisory board in order to scope of topics and agree on priority topics of FI-MEDIA for clustering;

2. **Individual cluster development** in EU and India clusters in priority topics;

3. **Design and implement travel mobility system** for the clusters engaged in the topics interested in developing partnerships in EU-India;

4. **EU – India C2C partnership engagements** in the selected priority topic;

5. **Report of success stories** of EU-India C2C partnerships formed each year;

6. **Regular dissemination** for visibility and sustainability.
Key Result Area

1. **Clusters are established** at EU and India around the **selected** FI-MEDIA topics;

2. **Mobility programme** contributes effectively to the building of the C2C partnerships;

3. C2C Partnerships **grows** with time and attain **self-sustainability**;

4. **Greater involvement & participation** of Indian Research & Industry elements **into NEM** and its globalisation activities.
Main topic areas scoped between India and EU in year 1

Smart villages  
Content for rural agri apps  
M2M/IoT  
Security and privacy  
FIWARE  
Smart campus

If you are from Industry or Research and fit anywhere here, please talk to us!!
Where we are now (year 1 of 4 year project):

Identify topic areas related to FI and Media for Clusters formation

Set up mobility scheme to enable EU-India cluster developments

Form / sustain Cluster-to-cluster partnerships (e.g. via workshops, mobility)

Disseminate and feed back results to community in EU and India e.g. H2020 planners

Activity Cycle

We are here

Iterated on regular basis
Roadmap: Successful & Sustainable R&I and Business Engagement

- Project promotion & cluster formation
- Facilitating C2C Engagement
- Synergy Identification & Fruitful engagements
- Successful R&I and Business Roll-out
- Repeat Performance & Sustained R&I and Business relationships

Project Life Time

Post Project Sustainability
Immediate Opportunities
For Clustering between EU and India
Smart Campus Initiative @IITD
Background

Smart campus: inspired from idea of ‘smart cities’

Academic campuses: Knowledge creation, dissemination and guiding societies for better living.

Pillars for Smart Campus: infrastructure, operations and people.

Integration among pillars infused with intelligence to utilise resources efficiently

Key focus areas: Energy efficiency, Connected Services, Foster innovation and adopt best practices.
SMART?

IIT Delhi

Sustainable & user friendly services

Maintainable facilities

Affordable

Resilience

Township
Idea of a Smart Campus

Ecosystem fostering Innovation & Creativity within IIT Delhi Community
How EU can cluster with us

List of services in a smart campus

Select those which are sustainable or enhance sustainability

Involves students to foster entrepreneurship

Research opportunities
Campus Life Improvement: Security, noise and air pollution control, maintenance of infrastructure, making it disabled friendly.

Water and Power Audit of the Campus; Identify potential areas where savings can be made.

Underground and Over-ground map for the traceability of locations.

Move towards a paperless, transparent office.

Waste Management in general and waste water management in particular for hygiene and sustainability.

Issue of toilets and drinking water (engage professional firm).

Move towards Crowdsourcing for Idea Generation & Need Estimation.
Crowd-sourcing for Idea Generation

A portal for soliciting feedback was introduced during 17th Aug- 6th Sep 2015.

**Smart Services**
- Campus Smart Card options
- Academic Services
- Internal Services like networking, IRIS, CEP, Maintenance, etc
- Access to facilities / External services

**Sustainability**
- Classrooms & laboratories
- Infrastructure & Physical Assets
- Water resource management
- Electricity management
- Waste management
- Green initiatives

**Research Opportunities**
- Student projects
- Best practices documentation
- Learning and productivity
- Scalability
- Replicability
- Documentation
- Funded projects

**Business Opportunities.**
- Entrepreneurship
- Funded ventures
- Event design
- Any others

Identification of Potential Champions
Impact Vs Complexity (vs Importance)

- **Phase I**: High Impact, Low complexity
- **Phase II**: High Impact, High complexity
- **Phase II**: Low Impact, Low complexity
- **Phase III**: Low Impact, High complexity
## Phase 1: Smart campus initiatives

(High impact and low complexity)

### Smart cards for all students and employees
- Card based/Biometric attendance system for students
- Access to services (library, lab, hospital, printing, etc)
- Cycle dock (Bicycle sharing system)

### Facilities & infrastructure
- Smart security (CCTVs for Video Surveillance, etc)
- Sensor based doors for entry in Departments & Labs
- Bus tracking using GPS
- Smart speed sensors across campus
- Video conferencing facility in all departments
- Motion sensing lights and fans

### Access to information services / kiosks
- Searchable maps with GPS
- Availability of information kiosks in key locations
- Digital display panels at key locations
- Smart navigable notice boards
- Bulk SMS for common messaging / alerts
- Mobile portability for complete IITD website
- Smart interactive features using Web 2.0 in all website

### Sustainability
- Smart management of electricity
- Smart management of water
- Smart maintenance and mechanized cleaning
- Sensor based waste management (degradable vs non-degradable waste)
Phase 2: Smart campus initiatives
(Low impact & low complexity suggestions)

**Smart Cards**
- Add-on smart cards for family members
- Smart cards for contract employees

**Facilities & Infrastructure**
- Smart lecture kits for the management of classroom resources
- Transport / travel support
- Bicycle path besides roads

**Access to information services / kiosks**
- Online booking institute resources (classrooms, halls, guest house, online book recommendation).
- SMS Alert facility for notice/circulars (Title) to user groups
- Searchable key notifications (pdfs) repository and telephone directory

**Sustainability**
- Green / Non-green garbage collection
- Green trucking practices inside the campus
- Noise control mechanisms near road walls
Phase 2: Smart campus initiatives
(High impact & high complexity)

Smart Cards
• Cash free campus and digital wallets
• Integrated health system enabled through campus card (patient / doctors/ pharma)

Facilities & Infrastructure
• Smart meter/panels for electricity consumption
• Intelligent water-free bathrooms/toilets.
• Smart parking facilities

Access to information services / kiosks
• Integration of information of dept. & central library
• Digitization & integration of past official documents and paperless offices
• Online System for information retrieving / tracking requests & approvals
• Dashboard for employee and students
• Digital map of underground infrastructure

Sustainability
• Energy generation from the solid waste management
• Solar water heaters installed in hostels and residences
• Shaded footpaths with solar panels on top
• Regenerative systems across footpaths (generate power)
• Waste water management to prevent direct/indirect communicable diseases
Phase 3: Smart campus initiatives
(Low impact & high complexity)

Smart Cards

- Smart card for mess management and meal billing could be started

Facilities and Infrastructure

- Online management of inventory items may be started under maintenance facility.
- ICT enabled facilities implemented for physically challenged
- Speech technology enabled kiosks

Sustainability

- Bio-gas plant could be developed to generate energy
- Monitor carbon footprint of the campus (U Chicago Waggle project)
- Rainwater harvesting for all buildings on campus.
Implementation
Smart Solutions

Independent
- Cycle dock
- Smart digital displays
- Sensor doors

Integration
- Network of sensors, CCTV etc.
- Back office integration
- Analytics
- Dashboard
Next?
Implementation strategy

- Phasing of the activities
- Identifying Champions
- Forming teams
- Seeking collaboration
- Budgeting
- Elaborate each action points by the team
- Project planning
- Deployment
- Monitoring

23-10-2015
Way Forward

- Clustering partnerships in PPP mode
- Foster research in variety of areas
- Sponsored research (DEITY, EU H2020, WAGGLE)
- Ecosystem for collaborations
- Foster entrepreneurship
- A reference model of Smart Campus
You may reach us @

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Thank you