## *TW-JO – capacity building plan for MoTA IT staff*

### Tracks

- Track 1 – **mobile applications design and development**, Province of Florence, 3 weeks, 6 STE-weeks
  - Unit 1, 20-24 October 2014, 2 STEs – *introduction*
    - review of HCI
    - Firenze Turismo case study
    - introduction to prototyping tools
    - hands-on workshops drafting Jordan Tourism
    - mobile UI design principles & patterns
  - Unit 2, 23-27 November 2014, 1 or 2 STEs – *mobile application programming tools*
    - Android SDK
    - hands-on workshops
  - Unit 3, 24-30 January 2015, 1 or 2 STEs – *investigating and customizing the case study*
    - analysis of technical solutions adopted in Firenze Turism
    - prototyping some functionalities for Jordan Tourism
    - presentation of the back-end architecture
    - populating the resources&events database
- Track 2 – **setting up and managing application servers**, CSI Piemonte, 1 week, 1 STE
  - Setting-up IIS
  - Deploying web applications/services on IIS
  - Setting-up SQL Server
  - Implementing a geographical database on SQL Server
- Track 3 – **designing and developing web user interfaces**, CSI Piemonte, 2 weeks, 1 STE
  - Unit 1
    - Development of web services and applications on the .NET platform (or equivalent open source framework running on MS platform)
  - Unit 2
    - Designing web sites/applications: structure and navigation
    - User-centred design of web sites/applications
    - HTML 5 & CSS 3
    - Device-independent web sites/applications: responsive design
    - Showing geographical information on third-party maps (e.g. Google Maps)
- Track 4 – **secure web applications and services**, CSI Piemonte, 1 weeks, 1 STE
  - Security issues in web applications [both software and systems]
  - Security-aware programming of web applications/services [software]
  - Securing networks hosting public web applications and services [systems]
- Track 5 – **social media**, CSI Piemonte, 2 weeks, 1 STE
  - Review of social networks
  - Social media presence
  - Integrating social networks in web sites/applications
  - Social media for careers promotion

### Rationale

Tracks 2-4 are aimed at replicating selected parts of server components and web applications derived from the Firenze Turismo case study on the MS platform:

- implement geodatabase for resources and events,
- develop and deploy web services to access the geodatabase,

- develop and deploy web applications to ingest/update resources and events,
- develop and deploy web applications to search resources and events

## Dependencies

To satisfy dependencies among different tracks/units, the following order should be followed:

1. creating the database
    - Track 2, expected output application server, database
2. delivering data through web services
    - Track 3/Unit 1, expected output: web service
3. consuming web services
    - Track 1/Unit 3, expected output: Android app calls web service
    - Track 3/Unit 2, expected output: web application with query form and results page

## Target audience

- tracks 1, 3: software designers and developers
- track 2: system/network administrators, software designers and developers
- track 4: system/network administrators
- track 5: software designers and developers, communication team

## Time plan

Following the above listed dependencies and the target audience for each track/unit, a time plan can be drawn where some tracks could also be carried out in parallel.

## Innovative solutions

Further applications for innovative technologies and solutions in the field of tourism for innovative solutions can be presented and investigated during the study visit in Italy and during the mission planned for March/April 2014.