



BRIDGET



Proposal for a Media Linking Application Format (MLAF)

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Background

- Companion screen applications let user enjoying broadcast programmes access related information on other – typically internet-connected – devices.
- The European Commission FP7 project “BRIDging the Gap for Enhanced broadcast” (BRIDGET) has developed the notion of *bridget*:
- In BRIDGET, a bridget is a link from the programme being watched to external interactive media elements such as web pages, images, audio clips, different types of video (2D, multi-view, with depth information, free viewpoint) and synthetic 3D models.



Bridgets have a more general application



- A bridget can be a collection of links from a set of source media items to a set of destination media items, e.g.
 - An image points to an image or a set of images
 - An object in an image points to an object in an image or to an image or to a set of images
 - A slide part of a slide show points to audio clip
 - An audio clip in an audio points to the corresponding score sheet
 - Different images drawn from a programme point to different web pages
 - A video clip from a video points to a set of related videos
 - Etc.



Fundamental components of a bridget



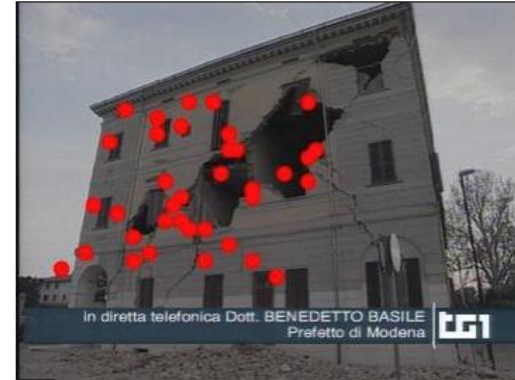
- Information related to the source media item
 - Which is it? What is its content about?
- Information related to the destination media item.
 - Which is it? What is its content about?
- Information about the link itself (contextual information)
 - Why source and destination media should be linked?
- Information on how the bridget itself should be presented to the user.
 - How all the above information should be presented to the user?

What this proposal does contain?

- Some use cases
- Initial set of requirements derived from the technical proposal
 - These are just a starting point
 - We will develop these requirements during the next meetings
- A first technical proposal

Enhanced News and Crowd Journalism

- Franco is abroad and heard from TV about an earthquake near his birthplace
- Franco uses bridgets included in the TV stream to learn more about the damage to the monuments in his town
- Linked pictures are taken from the internet as well as from many different broadcasters



SISMA
Sindaco e assessori aiuteranno le popolazioni colpite dal terremoto in Emilia



Il sindaco di Ravenna Fabrizio Matteucci e gli assessori comunali, come stanno facendo molti ravennati, parteciperanno alla sottoscrizione a favore delle popolazioni emiliane colpite dal terremoto. «In questi giorni – afferma il primo cittadino – stiamo assistendo ad una vera e propria gara di solidarietà nella nostra città. Alcune famiglie sono attualmente ospitate in alcuni alberghi del nostro territorio. Una bella iniziativa nata in rete sta coinvolgendo centinaia di studenti delle scuole. Ringrazio tutti i ravennati per la loro generosità, anche in questa occasione hanno dimostrato di avere un cuore grande. La nostra amministrazione comunale è in costante contatto con la Regione Emilia Romagna. Nei prossimi giorni sapremo come Ravenna potrà contribuire in modo concreto alla fase della ricostruzione».

Per chi volesse sottoscrivere a favore delle popolazioni colpite dal terremoto, la Regione sul suo sito web ha reso note le modalità attraverso le quali cittadini ed enti potranno versare contributi in denaro. Si possono usare, a scelta, i seguenti canali: 1) bonifico bancario alla Unicredit Banca Spa Agenzia Bologna Indipendenza - Bologna. IBAN coordinato bancario internazionale: IT - 42 - 1 - 02008 - 02450 - 000003010203; 2) versamento diretto presso tutte le Agenzie Unicredit Banca Spa sul conto di Tesoreria 1 abbinato al codice filiale 3182; 3) versamento sul c/c postale n. 367409 intestato a Regione Emilia-Romagna - Presidente della Giunta Regionale - Viale Aldo Moro, 52 - 40127 Bologna. Il versamento dovrà essere accompagnato dalla causale: Contributo per il terremoto 2012 in Emilia-Romagna.

Articoli correlati
 Errani commissario per la ricostruzione (30 Maggio 2012)
 In fuga dal terremoto a Gavernara (21 Maggio 2012)
 Si spengono luci e musica al bagno Toto per ricordare le vittime del terremoto (21 Maggio 2012)
 Dopo il terremoto 14

- The Trevi fountain of “La dolce vita” becomes an active object during view
- Links to other views of the fountain from other films by Fellini
- 3D models of the fountain also available
- Used as excuse to enlarge experience to other related monuments (e.g., churches of Rome)



- Emily is back from a holiday in Crete and learns that the National Broadcaster is going to broadcast a documentary on the region
- She shares her photos and material on the BRIDGET web site, using the simplified AT
- Shared pictures are used by the broadcaster staff to enrich the broadcast (using the professional AT)



Virtual Media Extension of the Broadcast Screen

- Some friends are watching a TV documentary about the city of Patan
- On their tablets they can experience a full 3D model of the city, built using other documentaries or pictures from users
- The player also prompts users about the availability of similar views of the same scene

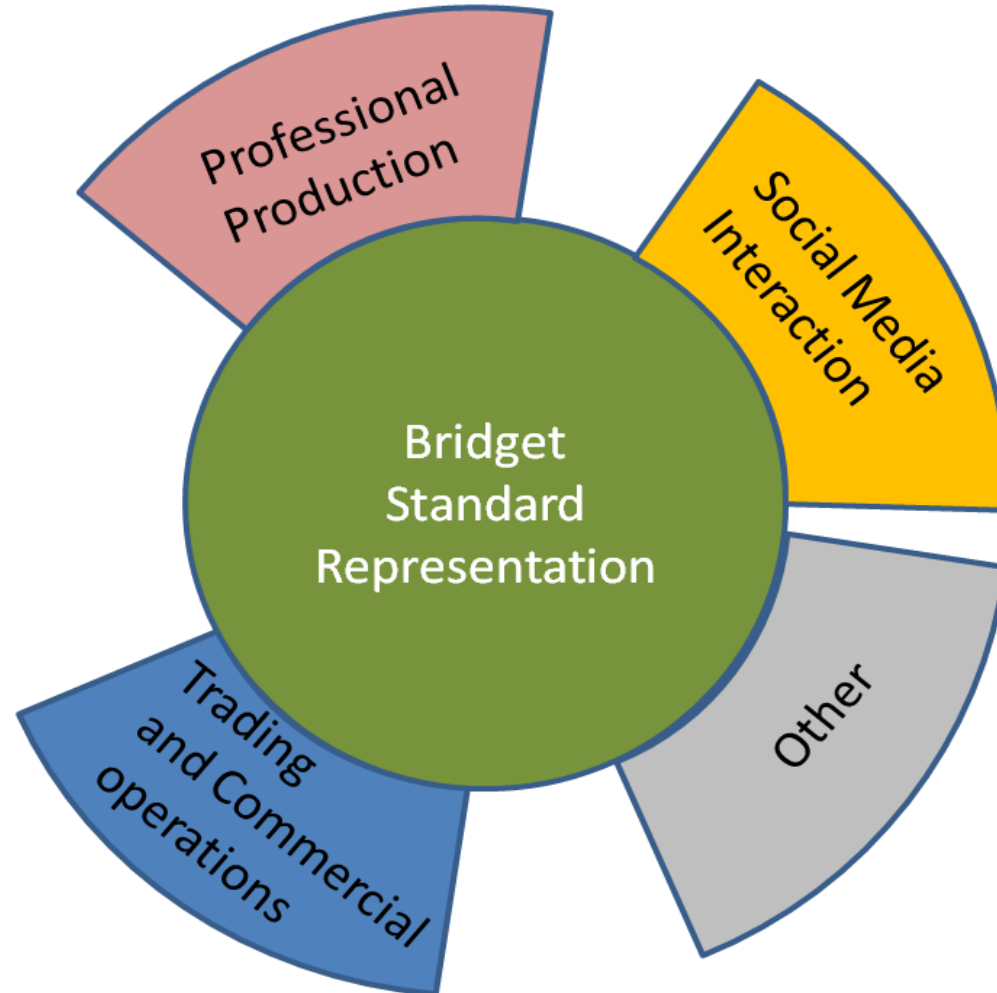


- A family is watching an episode of a Kids Entertainment programme, enriched with bridgets
- Family members can access instructions for the artworks they see by clicking on visual objects
- Kids can upload and share their drawings, through the use of the simplified AT
- Top-10 drawings are used to compile an e-book



Visual instructions

Why do we need a standard? Typical bridget “workflow”



Requirements

- First set of requirements discussed yesterday
- Output of Draft Req decided

Do we start from scratch?

Enabling technologies

Source	Standard	Part name
MPEG	4	Scene description and application engine (part 11), Animation Framework eXtension (part 16)
MPEG	7	Profiles (AVDP)
MPEG	7	Schemas (AVDP)
MPEG	21	Digital Item Declaration Language
MPEG	21	Digital Item Identification
MPEG	21	Fragment Identification of MPEG Resources
MPEG	Exploratio n	MPEG-UD
EBU	Tech 3293	EBU Core



Technical Proposal



- See XML Schema

Conclusions

- A standard for media linking applications is needed to enable applications dealing with producing and consuming information related to links among digital items
- We provide a technical proposal and started to derive an initial set of requirements
 - To be completed during interaction and used to improve the technical proposal for the standard
- Proposal of actions
 - Output a MLAF WD
 - Output a Draft Requirements Document
 - Establish an AhG
 - Improve and extend requirements
 - Analyse possible technologies
 - Improve MLAF WD