

# Cultural Heritage in EIA, Good Practices and Lessons Learnt, Greece

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#### Main legal provisions:

- □ Art 24 paragraph 6 of the Constitution, whereby: «Monuments and historic areas and elements shall be under the protection of the State».
- □ Law 3028/2002 which currently constitutes the backbone of the legislation

#### Protected elements:

The cultural heritage of the Country consists of the cultural assets located within the borders of the Greek territory, including the territorial waters, as well as within other sea zones on which Greece has relevant jurisdiction in accordance with the international law. Cultural heritage also includes the intangible cultural assets.



#### Definition of terms:

- ☐ Cultural assets are the testimonies of the existence of the individual and collective creativity of man.
- Monuments are the cultural assets that constitute material testimonies, belong to the cultural heritage of the Country and call for special protection
- □ Archaeological sites are areas on land, in the sea, in lakes or in rivers that contain or there is evidence that they contain, ancient monuments, or which have constituted or there is evidence that they have constituted monumental, residential or burial groups from the ancient times up to 1830.
- ☐ Historical places are areas on land, in the sea, in lakes or in rivers that constitute or there is evidence that they have constituted the place of important historical or mythical events, or areas where there is evidence that they contain monuments dating after 1830.



#### the notion of «immovable monuments» includes:

- ☐ ancient monuments dating before 1830,
- more recent cultural assets that are earlier than the last hundred years, being, subsequently, characterized as monuments due to their architectural, urban, social, racial, traditional, technical, industrial or generally historical, artistic or scientific significance,
- more recent cultural assets falling within the period of the last hundred years, being, subsequently, characterized as monuments due to their architectural, urban, social, racial, traditional, technical, industrial or generally historical, artistic or scientific significance.



#### Interventions on monuments

- □ A permit from the cultural heritage services is necessary before any other relevant permit
- MoUs are signed between the project promoter and the services
- ☐ In case of findings the competent services may decide the:
  - Conservation of the asset, in a visible way defining the necessary actions for its promotion
  - Conservation of the asset in the ground
  - Non conservation of the asset
  - Relocation of the asset
- ☐ The cost of the above is included in the project cost

## **Environmental legislation Context**

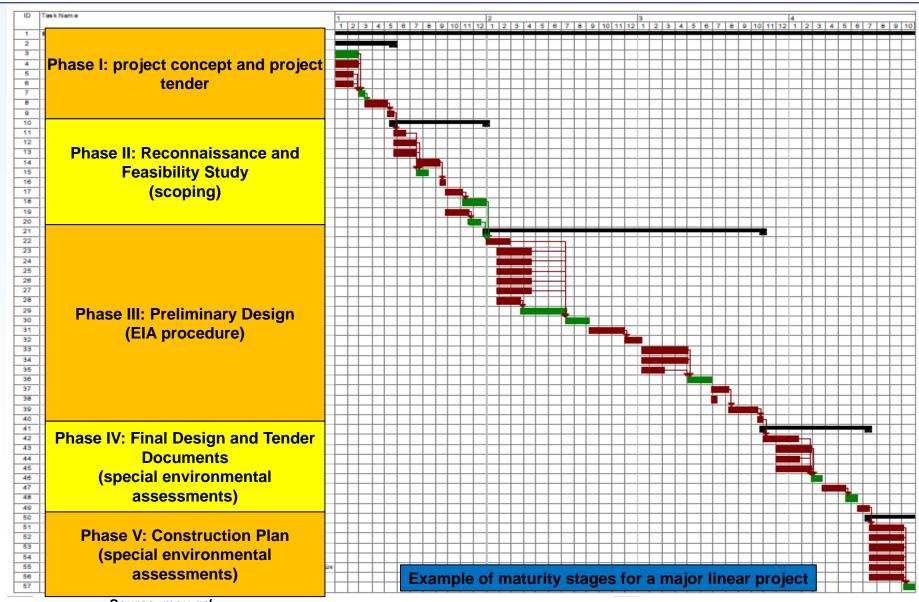


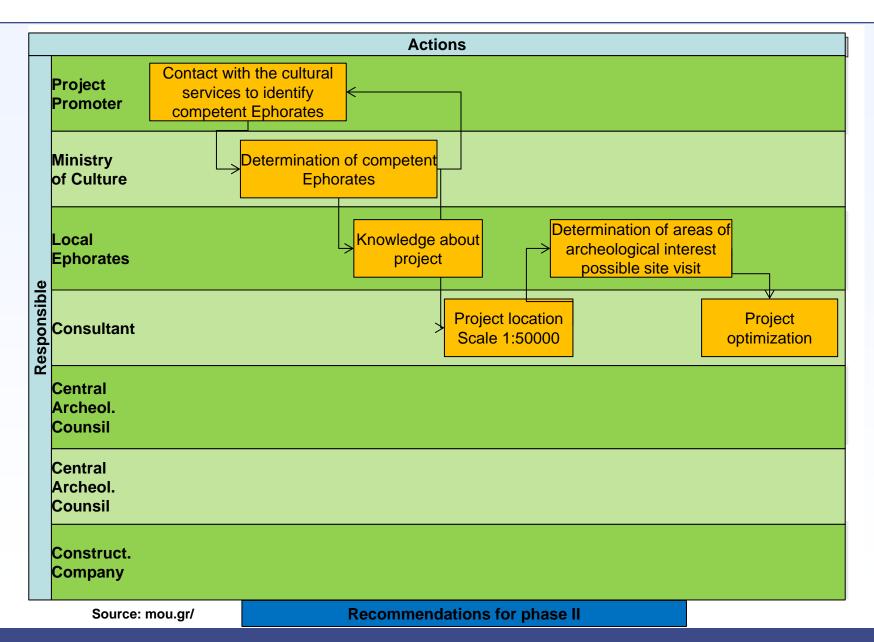
- Specific provisions are included in the Environmental Impact Assessment legislation about:
  - The high level content of the scoping report and an EIA report
  - The necessary consultations and approvals from Cultural authorities for projects for which scoping is requested and/or an EIA is done
  - The necessary consultations and approvals from Cultural authorities for projects for which a "screening" is done
  - The high level content of the scoping decision and the EIA Decision

Looking at cultural impacts at the scoping stage or at the EIA stage, would that be effective enough?

- In order to better prepare EU funded projects a Guidance Manual for project practitioners was prepared in 2003 and updated in 2012. Among others the following practices were proposed:
  - ✓ Project alignment and design could benefit from a first consultation with the cultural heritage authorities at the preliminary study stage (project location identified on maps 1:50 000), even before the environmental impact assessment is initiated
  - Consultations with the cultural heritage authorities during the feasibility and final design stage could:
    - lead to an alternative alignment
    - require some limited field investigations

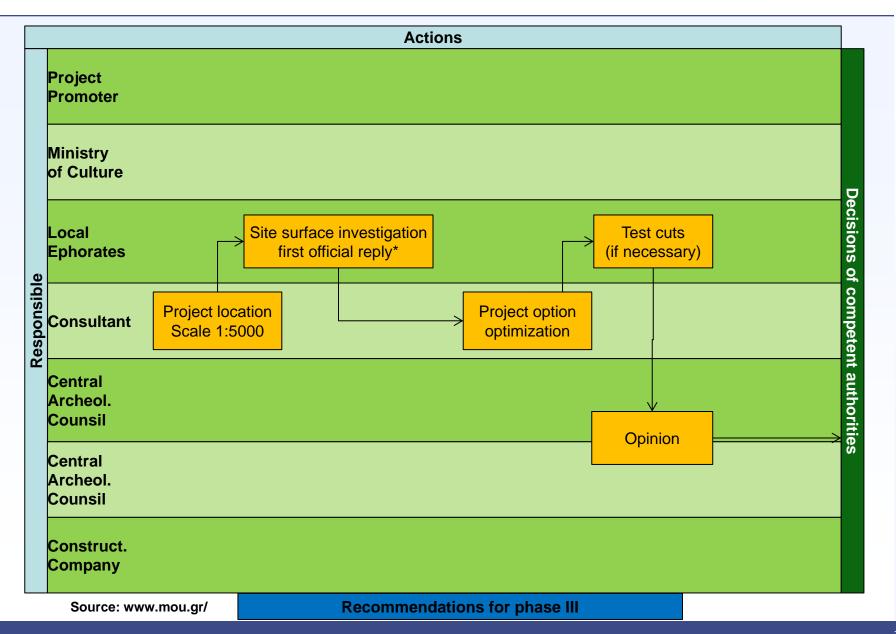






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Νέα Αναζήτηση   Συμβουλές Αναζήτησης   Πληροφορίες   www.culture.gr		
ιιι. Αφού επιλέξετε αν τα αποτελέσματα της αναζήτησης θα εμφανίζονται ως Κηρύξεις (προεπιλεγμένο) ή ως εγγραφές Αρχαιολογικών Χώρων-Μνημείων, μπορείτε να ορίσετε ένα ή περισσότερα κριτήρια		
αναζήτησης.		
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Ονομασία Μνημείου:		
(Για αναζήτηση με περισσότερους από έναν όρους, χωρίστε τους με κενό διάστημα)	<ul> <li>Αναζήτηση με απαραίτητη ύπαρξη όλων των λέξεων</li> <li>Αναζήτηση με οποιαδήποτε από τους όρους</li> </ul>	
Είδος Μνημείου:	Επιλέξτε Είδος Μνημείου	<b>∨</b>
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Καθεστώς Ιδιοκτησίας:	Επιλέξτε Καθεστώς Ιδιοκτησίας	<b>▽</b>
Ελεύθερη Αναζήτηση:		
(Για αναζήτηση με περισσότερους από έναν όρους, χωρίστε τους με κενό διάστημα)	<ul> <li>Αναζήτηση με απαραίτητη ύπαρξη όλο</li> <li>Αναζήτηση με οποιονδήποτε από τους</li> </ul>	

Source: http://listedmonuments.culture.gr/



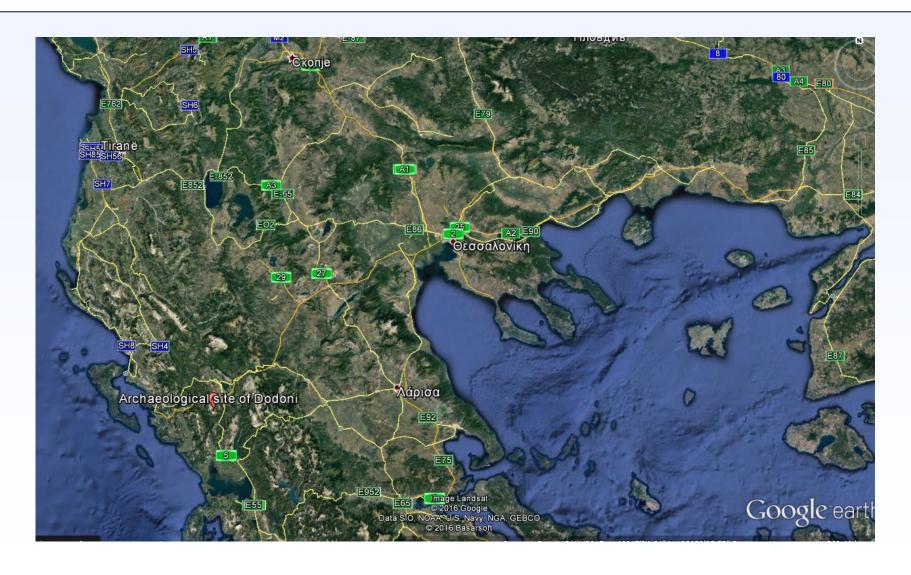
- The consultations with the competent cultural heritage authorities when done in a timely and constructive manner enable:
  - early identification of protected elements of the cultural heritage that could be impacted by the project (location is not the only criterion)
  - Estimating an approximate volume for the archeological excavations when they are necessary.
  - Identifying solutions such as:
    - better alternatives (both in terms of alignment and technology)
    - specific mitigation measures
    - cost of excavations and mitigation



Egnatia motorway: lessons learnt

# Project alignment

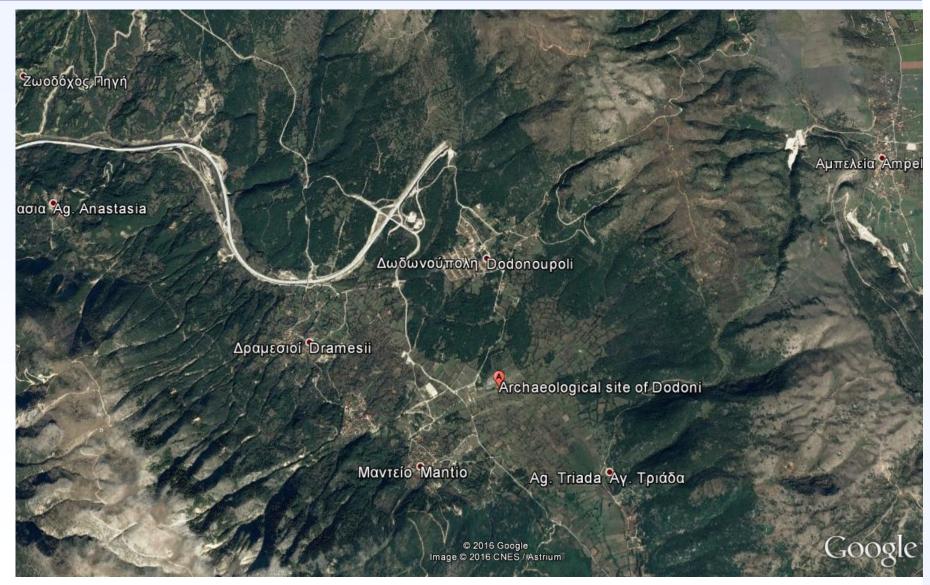




Source: Google Earth

## Alignment optimization at area of Dodoni

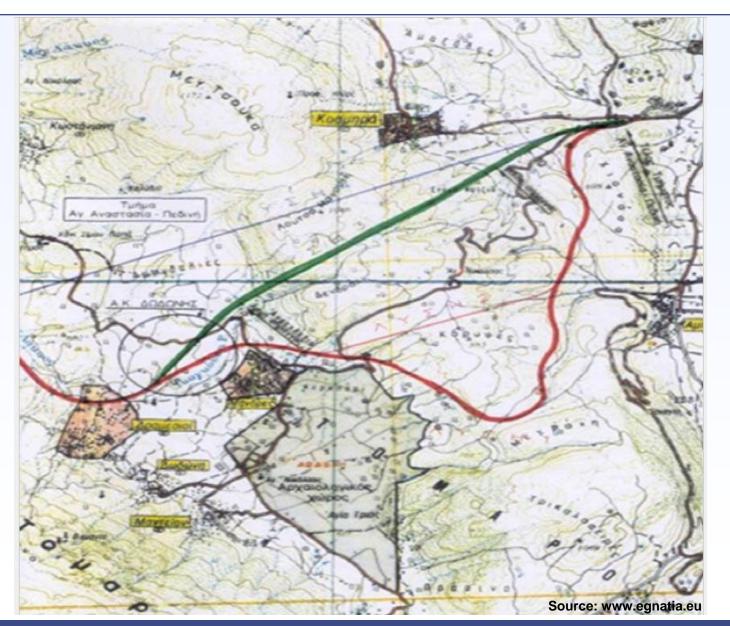




Source: Google Earth

## Alignment optimization at area of Dodoni



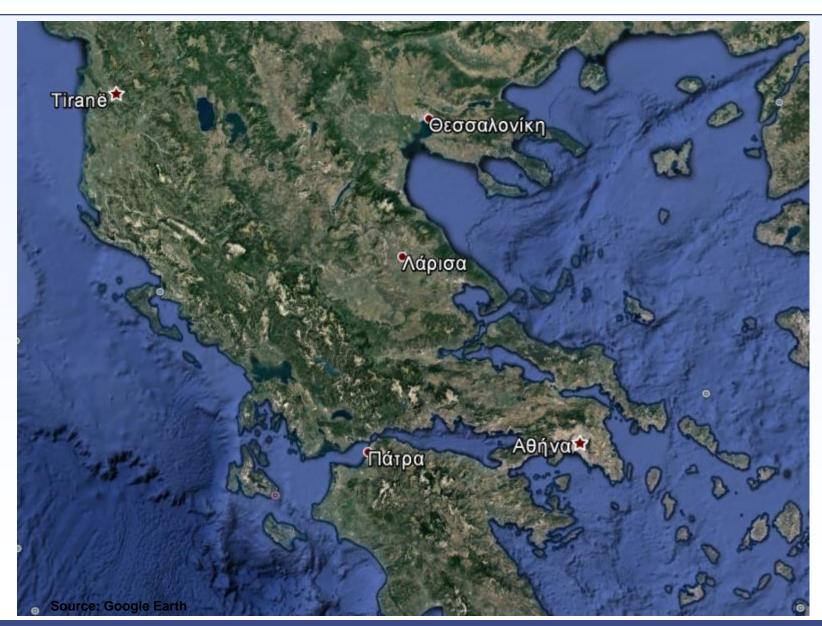




Thessaloniki Metro Project: lessons learnt

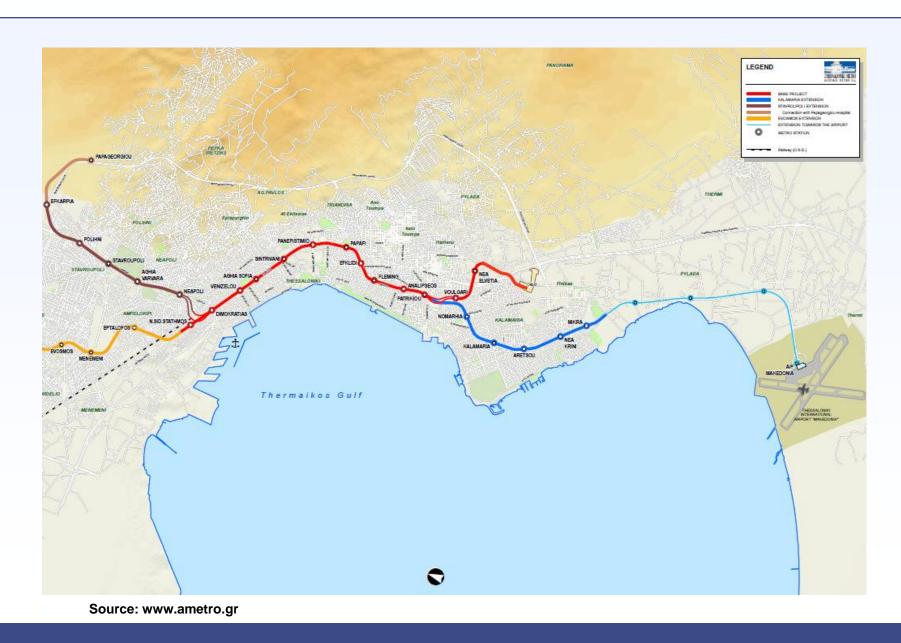
# **Project Location**





## Thessaloniki Metro: lesson learnt





## **Project Description**



#### Main project components:

- 13 stations
- 9,6 km of line (twin tunneling)
- 50,000 m² depot at Pylaia
- Five underground car parks
- A number of surface construction sites are foreseen
- Archeological surveys were expected to cover 20,000 m<sup>2</sup>

The biggest part of the project lays in the historical centre of Thessaloniki, inside and outside the walls of the ancient city, where there is a high density of ancient remains, which are revealed almost immediately after removal of the modern road and continue in-depth, reaching down to 9m.

Source: www.ametro.gr

## Permitting Background



- An EIA is mandatory for metro projects according to the National Legislation
- The first EIA was done in 1993
- It has been subsequently amended in 2004, 2009, 2010 and 2014.
- Additional screenings have been undertaken for associated infrastructure.
- The cultural services are statutory consultees of the procedures.

A detailed archeological documentation study was done in 2004, mapping the possible (or even certain) findings along the alignment

## **Project Challenges**



- The originally foreseen depth of the alignment was shallow, 7 to 9 meters deep
- Stations were foreseen at high risk locations, in terms of cultural environment (PLATEIA DEMOKRATIAS, VENIZELOS and AGIA SOFIA Stations), and medium risk locations (NEOS SIDIRODROMIKOS STATHMOS, SINTRIVANI and PANEPISTIMIO Stations).
- There was a certainty of archeological findings between the Train station and the University station; the density expected higher within the city walls.

## Thessaloniki Metro: lesson learnt







Source: www.ametro.gr

# Project Adjustments and Investigations during the construction phase



The tunneling between the stations is limited to depths -14 m to – 31 m

Some of the high risk stations' locations were adjusted (eg
the station at Plateia Dimokratias was moved away from the
city walls, for Venizelos station an MoU was signed recently
and the level of the station will be adjusted in order to
preserve the findings)

 Archeological investigations started in 2006 and are still ongoing. In 2014 the cost (which is covered by the project promoter) exceeded 8% of the total project cost

# Findings: Sintrivani





Source: 9th Ephorate of Byzantine monuments

# Findings: Benizelos







Εικ. 1 1. Σταθμός Βενιζέλου. Χάλκινοι επιστήθιοι σταυροί Βυζαντινών χρόνων.



Εικ. 12. Σταθμός Βενιζέλου. Χρυσό υπέρπυρο Ανδρονίκου Β΄ Παλαιολόγου - Μιχαήλ Θ΄ (1294-1320).



# Findings: Dimokratias





# Findings: Agia Sophia





## Conclusions



- □ The consideration of impacts to the cultural heritage has to start as early as possible in project development
- □ Early, voluntary consultations with the competent cultural heritage authorities can help the project promoter identify risks well in advance
- □ The cultural heritage baseline study needs to be robust. Cultural heritage experts need to be involved. It should be done at the right time, in order to feed into project alternatives. Central registers of protected assets, facilitate early screening
- Optimizing project alignment and construction technology, as part of the EIA report and procedure can save significant time at the construction stage