

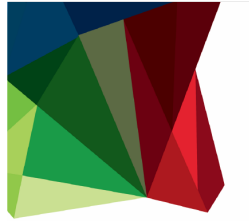


Julie Velissaratou

Buildings Infrastructure SA, Greece



**XII CONGRESO
INTERNACIONAL**
SOBRE EL DESARROLLO DE LA
INFRAESTRUCTURA EDUCATIVA
INIFED • MÉXICO 2015



XII Congreso Internacional sobre el desarrollo de la infraestructura educativa | INIFED, Mexico | Mazatlan, 25-27 November 2015

Discovering and improving the learning environments in Greece

Julie Velissaratou
Director General, Planning & Support Operations
Buildings Infrastructure SA

Mazatlan, 27 November 2015

Agenda

- Education in Greece at a glance
- Presentation of Buildings Infrastructure SA [BI]
- Operation model of Greek public schools
- Pilot project of upgrading 25 primary schools in Western Attica
- Form Follows Learning conference & other initiatives
- Next steps

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ΥΠΟΔΟΜΕΣ ΑΕ

BUILDINGS
INFRASTRUCTURE SA

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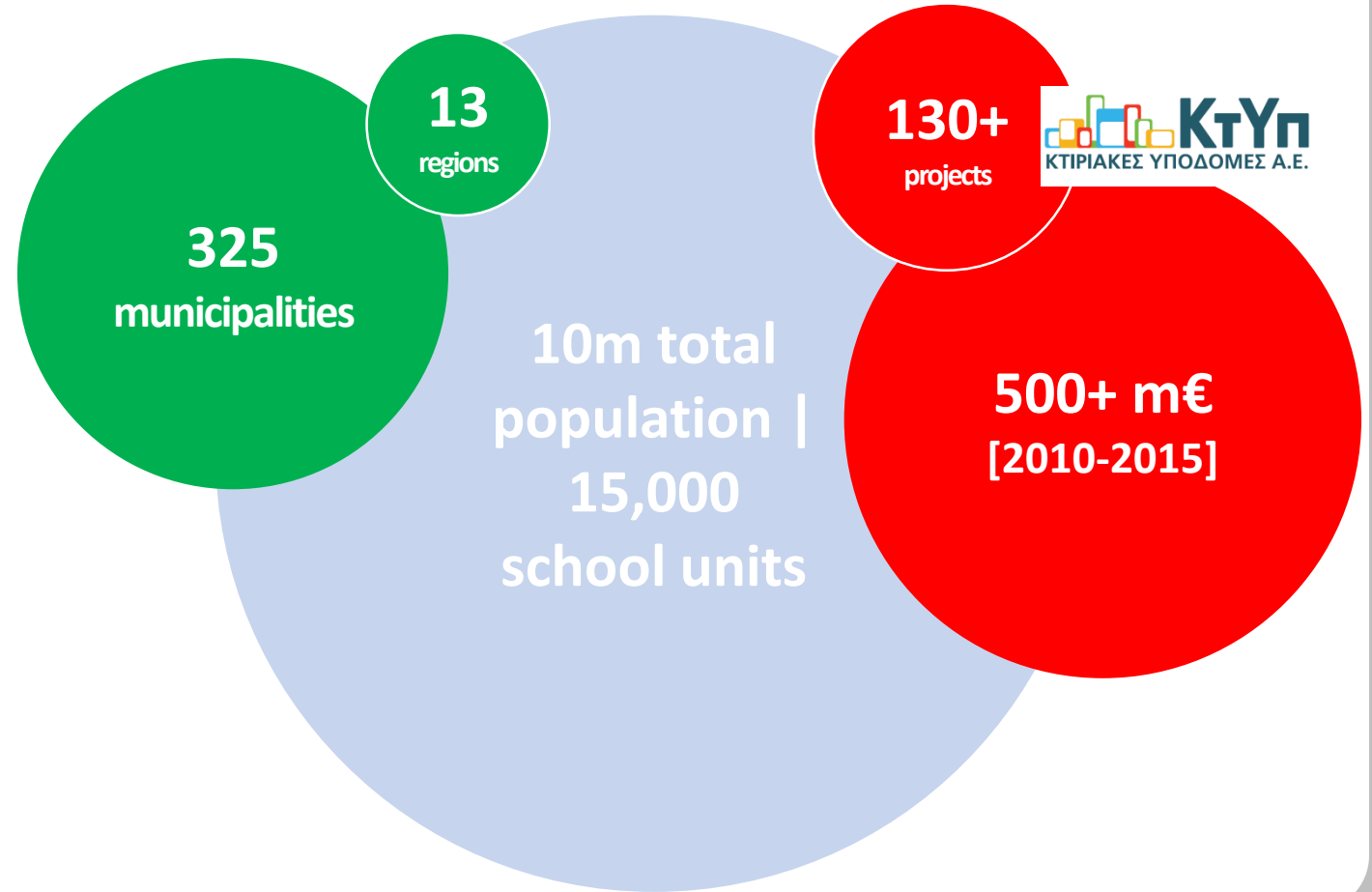
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What does the average Mexican know of Greece?



Education in Greece at a glance



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Merging of three public sector agencies [Law of Nov 2013]



- educational infrastructure | founded in 1962



- health infrastructure | founded in 1983



- justice infrastructure | founded in 1996



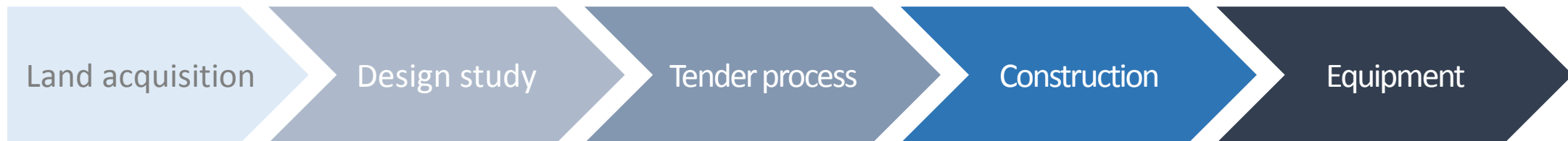
- one public sector agency to promote all public buildings throughout the country

Buildings Infrastructure SA in brief

- State owned company [SA] | unique shareholder: the Greek State
- Company was founded on Nov 2013
- Supervised by the Ministry of Infrastructure | in collaboration with the Ministries of Education, Health and Justice
- Provides public educational, health and justice infrastructure throughout the country; justice infrastructure was incorporated in the scope on 01 Aug 2015
- Authority to manage PPPs for school & other infrastructure in Greece

Buildings Infrastructure SA_scope

- main scope:
 - land acquisition, design study & construction of public buildings
 - procurement, storage and distribution of equipment
- construction is implemented:
 - either directly by the agency BI
 - or through PPPs
- responsible for all the processes of the value chain
- funding through:
 - State budget [Public Investment Programme]
 - Loan with European Investment Bank
 - EU structural funds



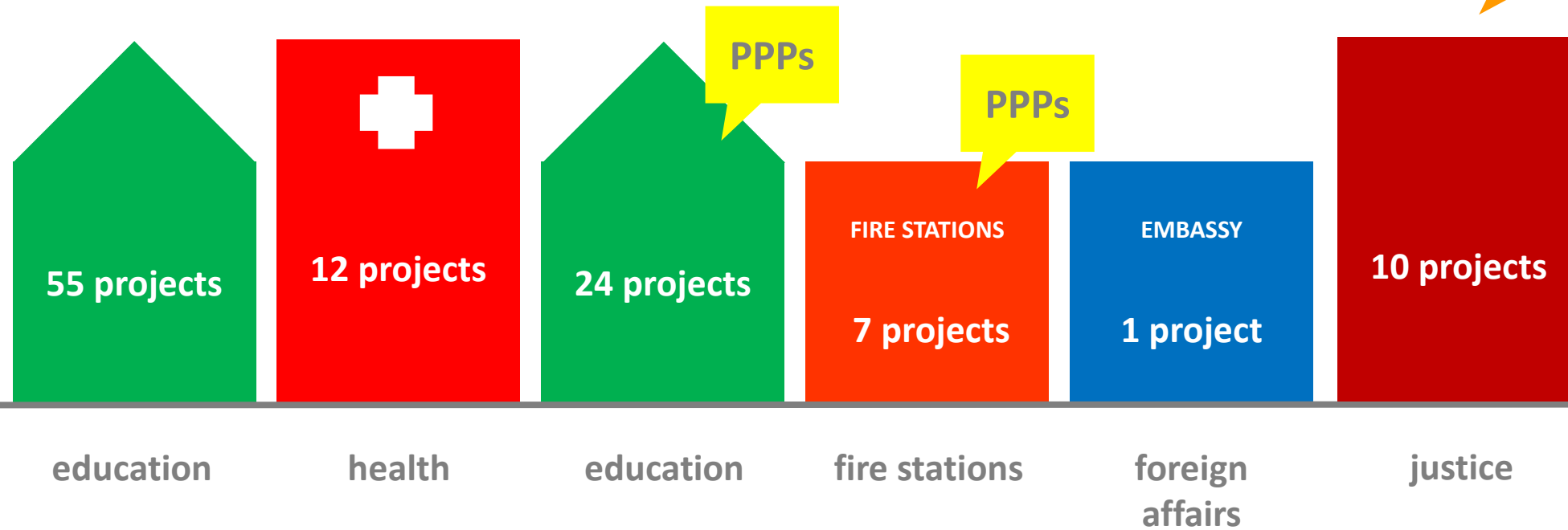
Buildings Infrastructure SA | Strategy

- **mission:** to provide modern and well equipped education, health and justice national public infrastructure/buildings in Greece and abroad
- **vision:** pioneer and innovative in providing public buildings' infrastructures, with respect to the environment

Technical Consultant of the State | assist the municipalities & local government

Current projects in a snapshot

- under construction ~100 projects of > 500 m €
- about to sign 26 new contracts
- planning to tender more than 40 projects



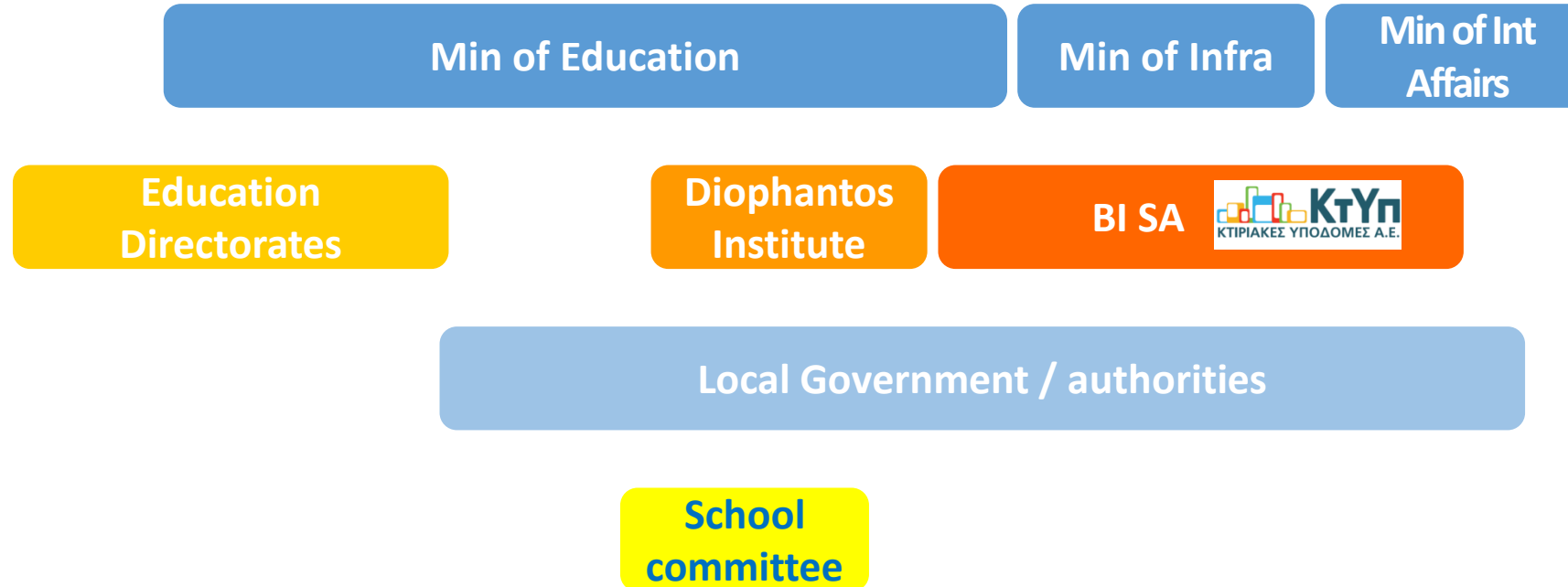
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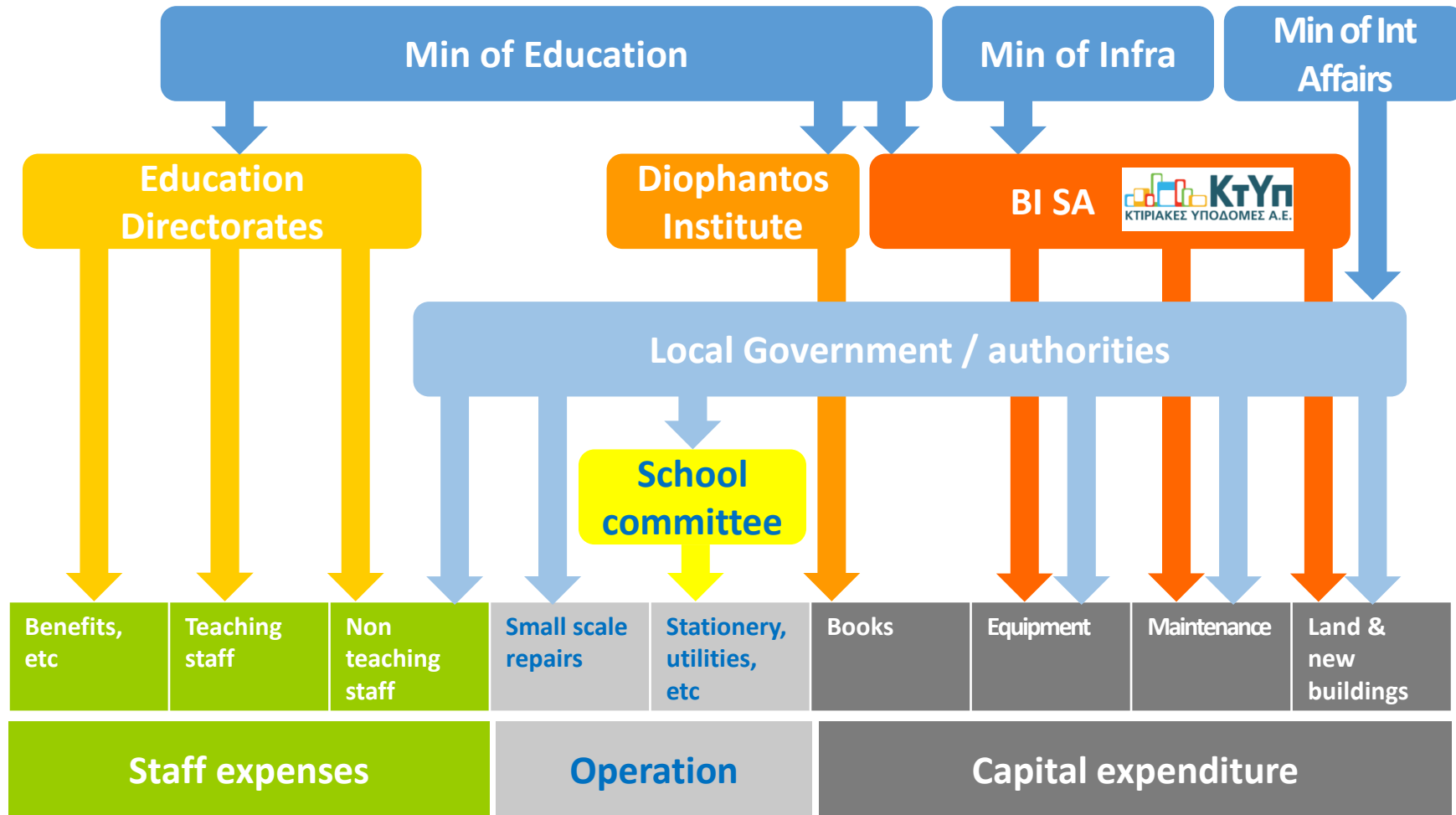
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Stakeholders involved in education



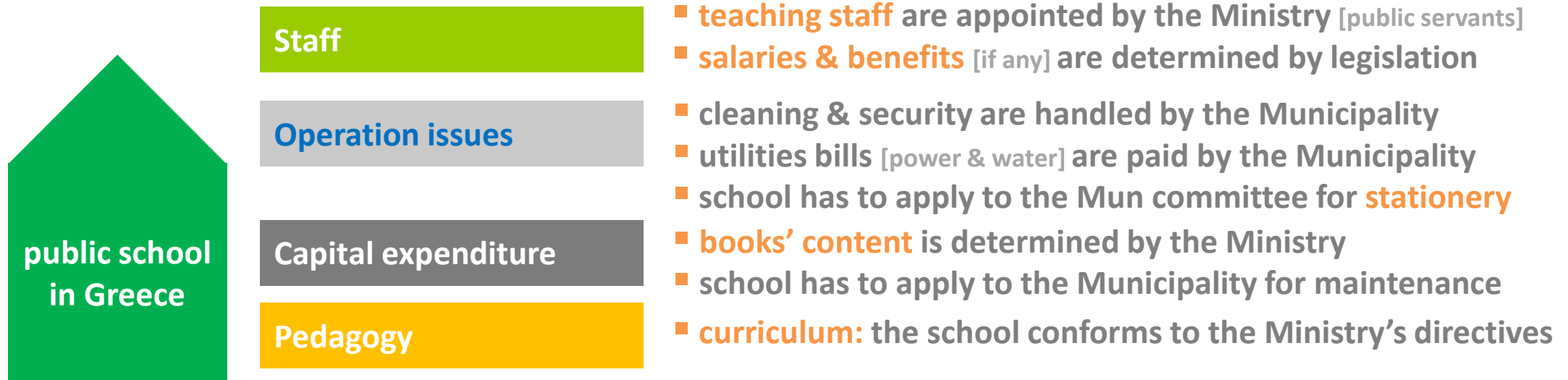
Benefits, etc	Teaching staff	Non teaching staff	Small scale repairs	Stationery, utilities, etc	Books	Equipment	Maintenance	Land & new buildings
Staff expenses			Operation		Capital expenditure			

Stakeholders involved in education



Operation model of Greek public schools

- **restricted autonomy/independence:** most of the issues are being handled by central or regional government [ie. the Ministry of Education or the local Municipality]
- no budget responsibility
- **school choices:** on minor pedagogical issues



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Pilot project in Greece is an urban acupuncture project

■ **Urban acupuncture*** is a socio-environmental theory that combines contemporary urban design with traditional Chinese acupuncture.

* wikipedia

- Urban acupuncture uses small-scale interventions to transform the larger urban context.
- Sites are selected through analysis of aggregate social, economic and ecological factors, and are developed through a dialogue between designers and the community.
- Just as the practice of acupuncture is aimed at relieving stress in the human body, the goal of urban acupuncture is to **relieve stress** in the built environment.
- Urban acupuncture is intended to **produce small-scale but socially catalytic interventions in the urban fabric.**

Goals & Vision of the Pilot Project

- **Goal:** creation of micro-environments in the common areas of the primary schools, that are children-friendly and challenge the pupils' creativity, curiosity, communication, collaboration and interaction skills
- **Vision:** enhance the educational outcome and the social behaviour
- **Population affected:** more than 4,000 pupils



Methodology & Funding

- Presentation to head masters of the pilot project
- Site visits to the schools by the BI project team
- Essays and creative work made by the pupils on the "ideal school"
- Final design studies
- Presentations to the school communities
- Tender documents & construction during summer 2013



- Funding secured through a loan of the **European Investment Bank**
- Estimated budget: 4m Euros
- Final cost: 2m Euros approximately

Sources of inspiration for the pilot project

Sir Ken Robinson has described a wonderful story in the introduction of his book **“The Element”**, about a six-year old girl drawing on a paper, totally absorbed in her art.

When asked about what she was drawing, the girl said “I’ m drawing a picture of God”.

Her teacher then said **“But nobody knows what God looks like”**, and the girl replied, **“They will in a minute”**.

Source of inspiration: creative work by the pupils



Source of inspiration: creative work by the pupils_no 2



Source of inspiration: examples from international schools



Source of inspiration: examples from international schools_no 2



Source of inspiration: examples from international schools_no 3



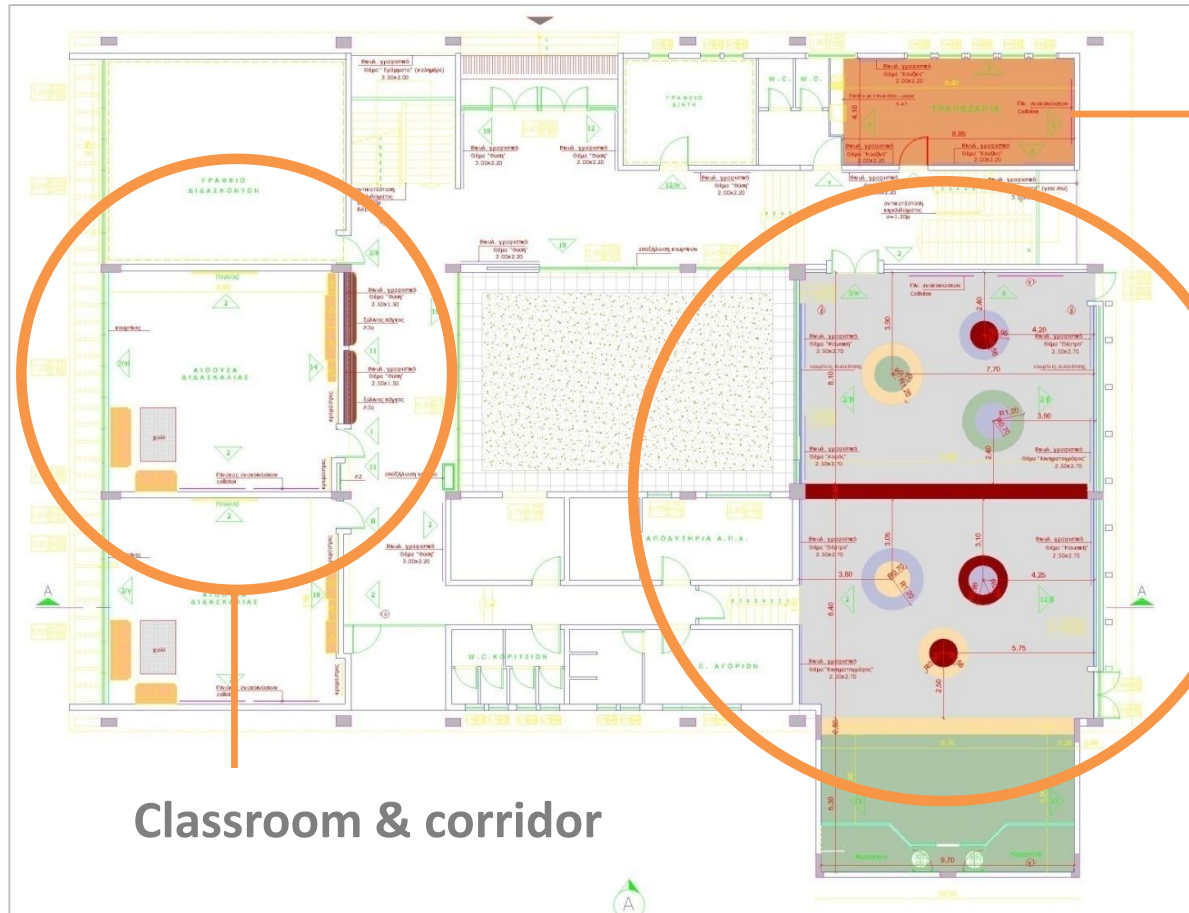
Source of inspiration: examples from international schools_no 4



Scope of the pilot project

- New colored floors; especially in common areas
- Paint the walls of the main lobby, corridors and multi-purpose hall; use of vivid colours
- Use graphic elements in the corridors [like wallpaper]
- Revamp the facades
- Create small social/interaction areas inside the classrooms and in the corridors [sofas, chairs, tables, etc]
- Upgrade technological equipment [interactive whiteboards, PCs]
- Install big message boards; cabinets; curtains

7th Primary School, Haidari

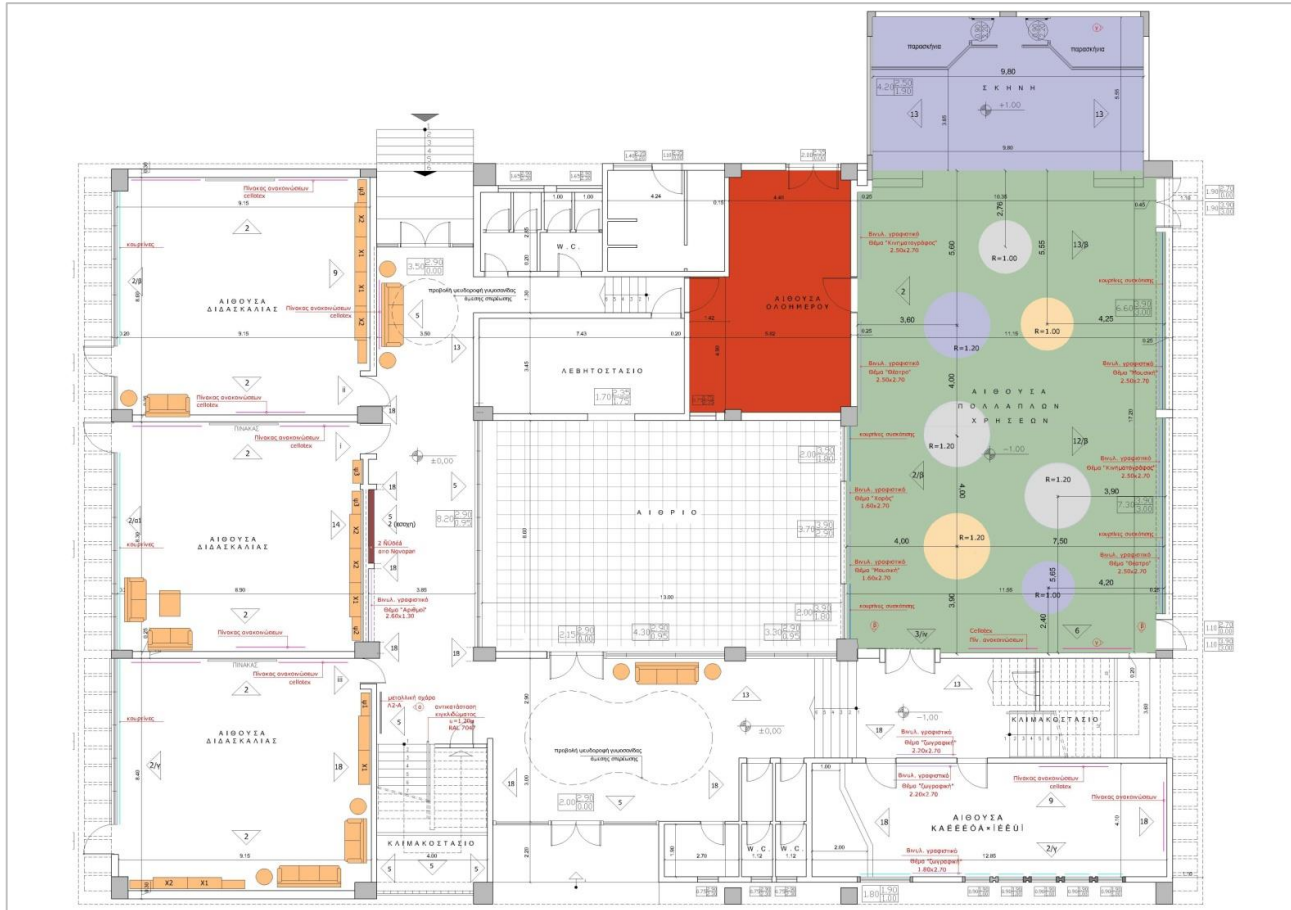


Dining room

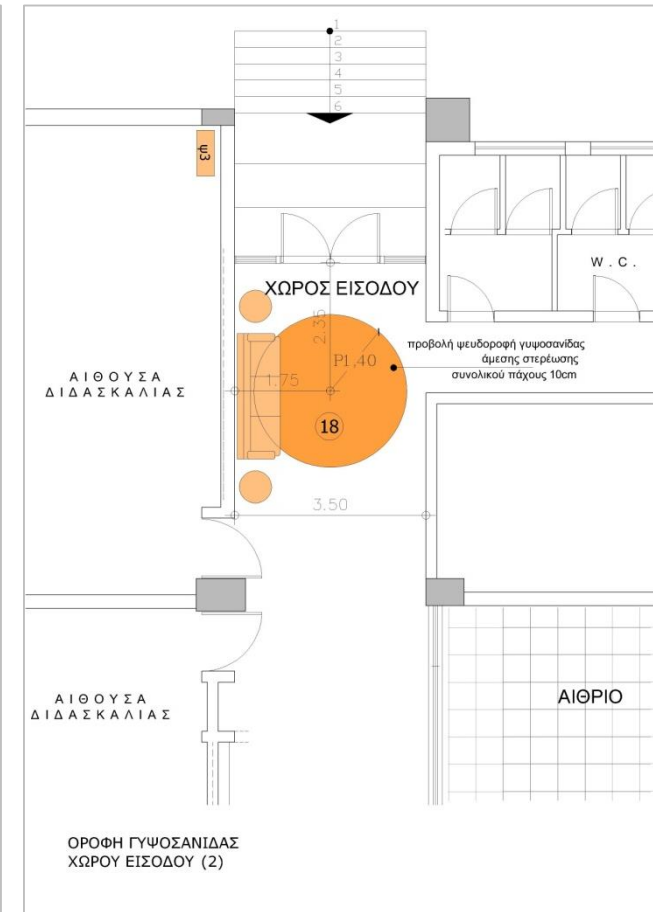
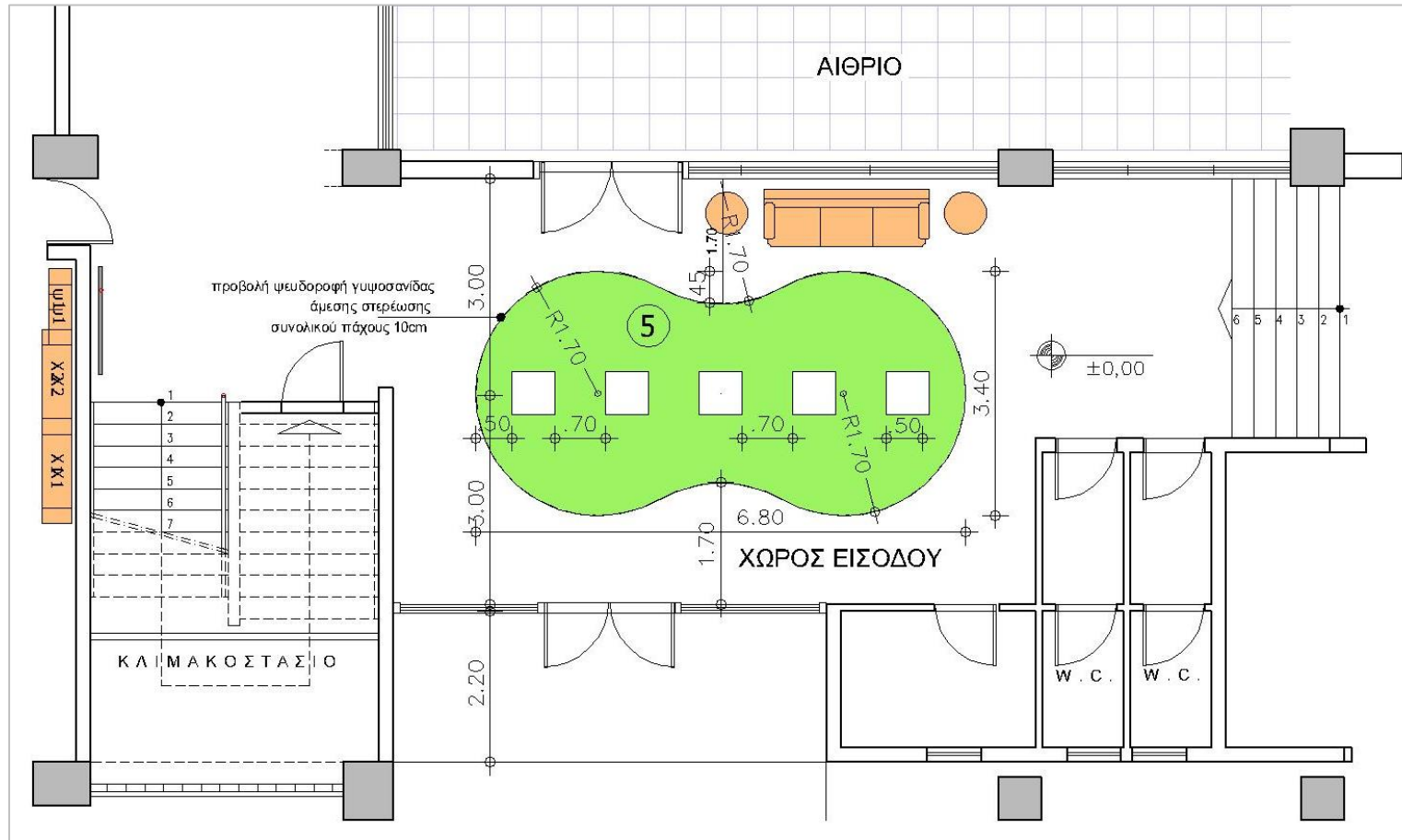
Multi-purpose hall

Classroom & corridor

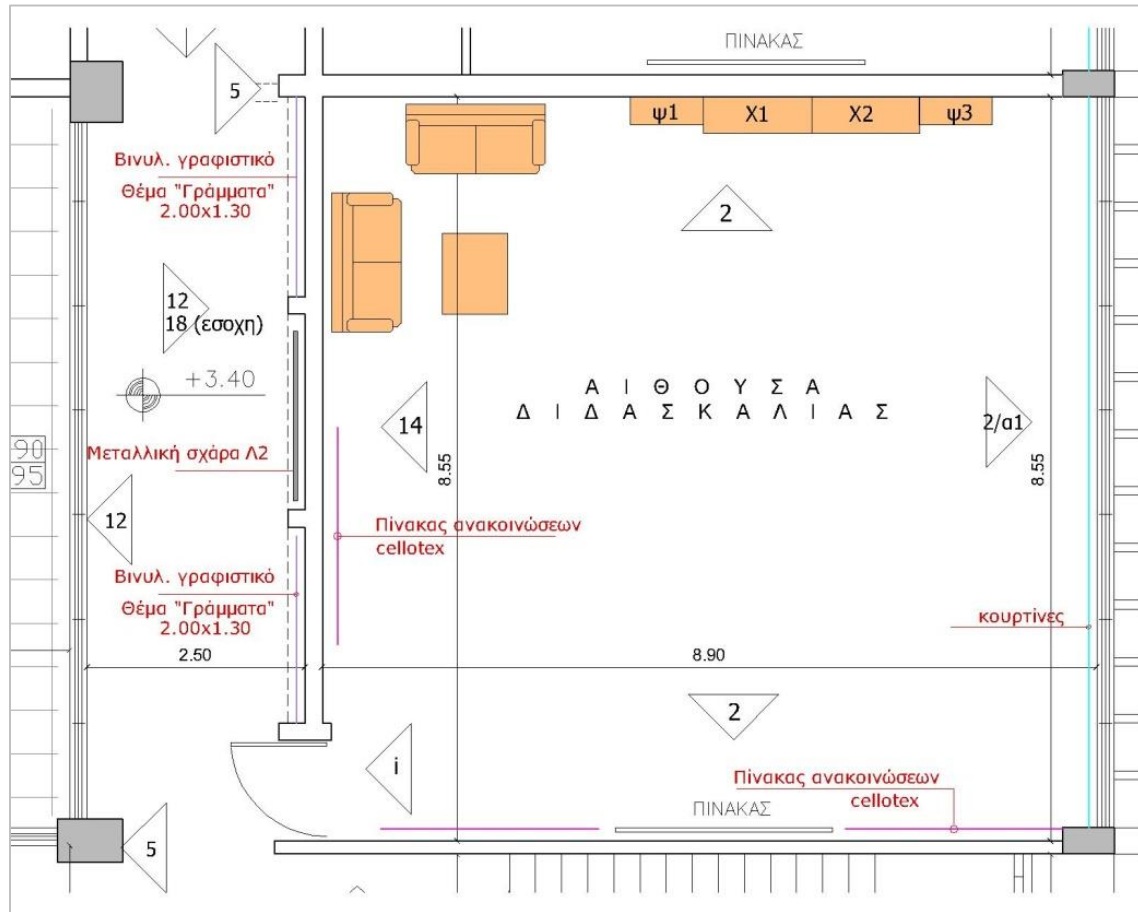
8th Primary School, Haidari | entrance level



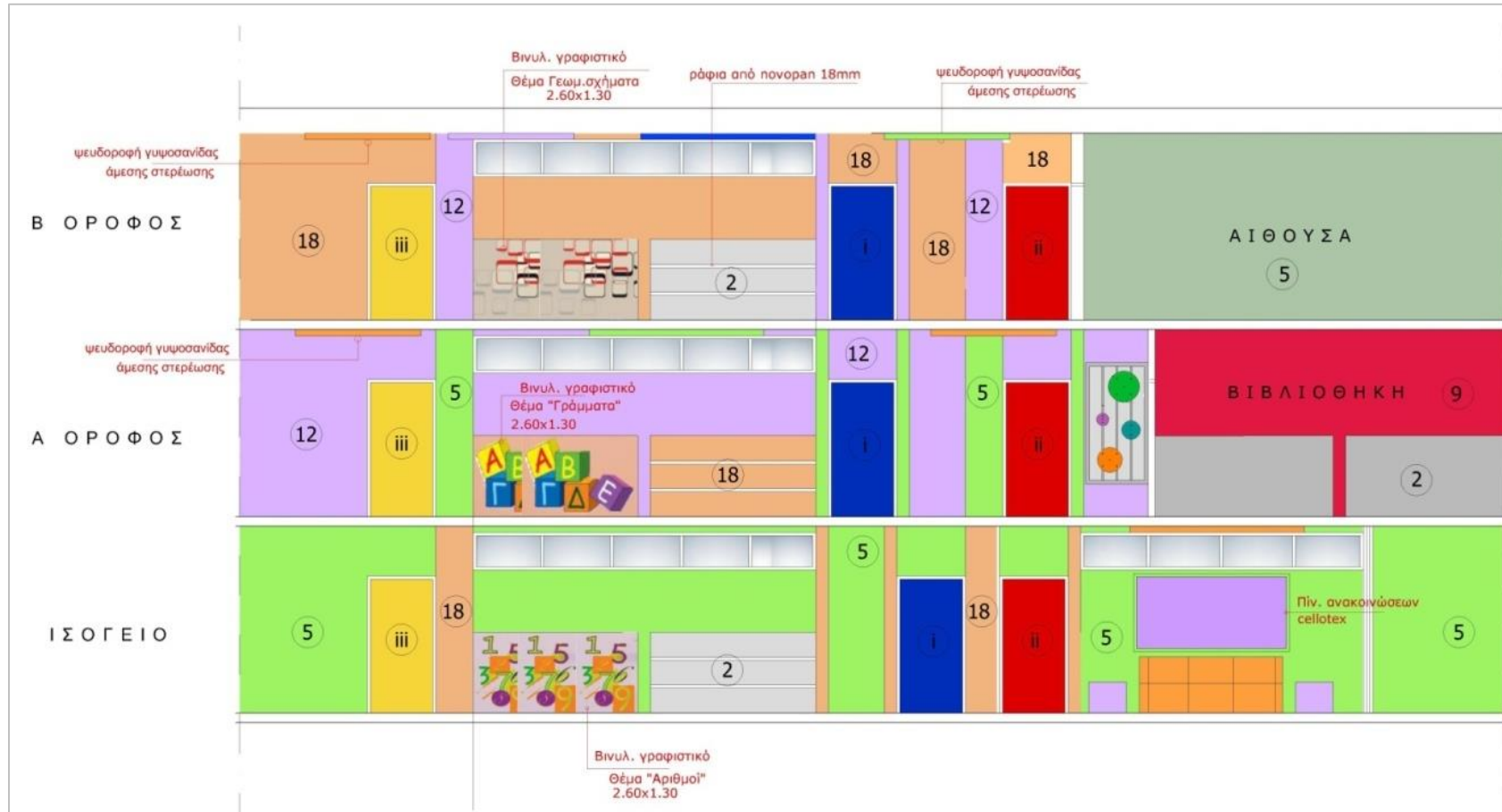
Details from the new ceilings in the lobby area



Classroom with new sofas & furniture



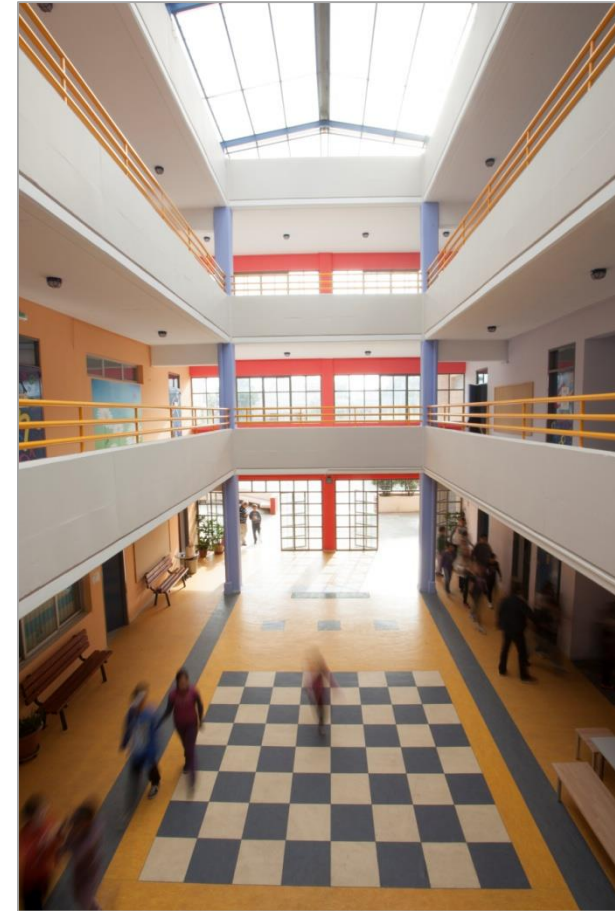
8th Primary School, Haidari | internal facades



Upgraded schools' photos



Upgraded schools' photos_no 2



Upgraded schools' photos_no 3



Upgraded schools' photos_no 4



Upgraded schools' photos_no 5



Upgraded schools' photos_no 6

BEFORE



AFTER



Upgraded schools' photos_no 7

BEFORE



Upgraded schools' photos_no 7

AFTER



Upgraded schools' photos_no 7

BEFORE



Upgraded schools' photos_no 8

AFTER



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Form Follows **Learning** | main facts & figures

form follows **learning**

- **Form Follows Learning [FFL]** inspired by the axiom expressed by American architect Louis Sullivan in 1896: “It is the pervading law of all things organic and inorganic ... that form ever follows function.”
- 120 participants from 14 countries
- 2day conference [9-10 Sep 2015] with 18 presentations & two workshops | schools visit on 11Sep
- all material is uploaded on website: www.formfollowslearning.com



Earthquake events on Jan & Feb 2014

- Two earthquakes in Cefalonia within a week [29Jan & 03Feb]; 5.9 and 6.0 on Richter magnitude scale



- School site visits within 3 days | Only 7 school units out of 75 needed retrofit | All other schools became immediately functional with minor refurbishment works
- 98 small relocatable units were sent to cover the needs of these schools | 5 new schools were set up in empty/available plots of land
- Design studies are completed for the 7 school units

Other initiatives of BI

- Greece is an **OECD member**, participating to conferences and working group meetings, exchanging know-how with other member countries
- Buildings infrastructure has **organised two conferences** in the past 5 years along with OECD: Better Value for Schools [May 2011] and Form Follows Learning [September 2015]
- Organised an **international architectural competition** about the European School in Crete | co-operation between SBO/BI and uia [international association of architects] | 393 registered architects from 50+ countries
- Environment is top in the agenda: SBO/BI commissioned a team of scientists + actors to **write and stage a play** about the environment and bioclimatic design; play was addressed to primary schools' pupils

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What is next in 2015 - 2016

- Greece still in recession
- Two PPP school projects will be over in Q3_2016, before next school year [24 school units] | Unique funding model for Europe: blend of JESSICA and European Investment Bank loan to the SPV
- EU structural funds next programming period 2014-2020 is not expected to be generous on education infrastructure
- Energy efficiency and relevant upgrade is top-of-the-list in the following years' agenda | We aim to obtain LEED certificate for the European School in Crete
- FFL has triggered the potential of a fruitful cooperation with National Technical University of Athens

Design of the future classroom is the next big design project of the agency

Q & As

Les agradezco mucho por su atencion!
Thank you for your attention! Any questions?

For more info contact Julie Velissaratou at jvelissaratou@ktyp.gr

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