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# Modernising Portugal's Secondary Schools

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# Modernising Portugal's Secondary Schools

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*In March 2007, the Portuguese government announced an ambitious plan to modernise secondary schools by improving the quality and usefulness of its teaching and learning facilities, while putting schools back into the centre of the community of which they are an integral part.*

## BACKGROUND

Portugal has a total of 477 public secondary schools. Some date from the end of the 19<sup>th</sup> century but the majority were built after 1970, reflecting the period of expansion in the school network and the extension of compulsory schooling. The schools are heterogeneous in terms of building types, architectural features and quality.

An assessment of the school buildings has revealed that they require renovation and/or repair work as well as improvements to their operating systems. Overall the facilities suffer from construction anomalies, physical deterioration and functional obsolescence which affect their environmental comfort, usefulness and image. Physical disrepair has resulted from the buildings' natural deterioration, as well as from the lack of ongoing maintenance programmes. The buildings have become less functional due to several factors, such as changes in usage since their initial construction, evolution of the curricula and educational practices, and the increasing use of information and communications technology (ICT). The facilities need to be made more efficient and suitable for modern needs, including bringing together formal education and vocational training systems.

## THE MODERNISATION PROGRAMME

Portugal's modernisation programme provides for improvements to 330 public school buildings by the year 2015 with a total investment of EUR 940 million, 60% of which will be funded by the European Union (EU), the state government and local governments. The remaining 40% will be secured through bank financing (25%) and through asset building actions and the development of business units (15%).

"Parque Escolar, E.P.E.", a government agency, is responsible for planning, managing, developing and carrying out the modernisation programme. It was specially created for this purpose and benefits from administrative and financial autonomy.

The programme aims to raise the standards of educational facilities, making optimal use of its funds while minimising disruptions to the schools.

The improvements are scheduled according to each building's degree of disrepair and to demand for additional student places. The need to optimally manage the EU funding and to distribute the construction work evenly throughout the regions of the country is also taken into consideration.

The budget provided for the improvements depends on an assessment of each building's functionality, suitability, condition and flexibility, as well as on its openness to community use outside school hours. Buildings with historic value receive special attention, since they require larger investments in order to protect their architectural integrity through specialised conservation and restoration work.

Most construction work will be carried out while the schools are fully operating, requiring attention to the school community's safety and comfort. In order to maximise use of the summer holidays, work will begin at the end of a school year and end approximately one year later at the start of the following school year.

The programme involves redesigning existing facilities by reorganising the spatial layout; recovering and restoring inadequate spaces; improving habitability, safety and accessibility; removing poor quality spaces; and replacing failed building systems and components such as sanitary, mechanical and electrical services. New formal and informal learning resource areas will be added to provide more diversity, and working spaces will be created for the teaching staff. Special efforts will be made to improve school library/ICT resource areas, science facilities, vocational training areas and sports facilities.

New standards for state-of-the-art infrastructure have been developed for the programme, providing a benchmark to ensure adequacy and equity across the school system and parity within the EU. The aim is to develop innovative responses to the new educational and environmental paradigms, taking into account the curriculum, functionality, motivation, replicability and sustainability. The buildings should offer the following:

- **Attractive spaces** that promote well-being, allow good teaching practice, provide access to information and support teachers' work outside the classroom.
- **Flexible spaces** that can adapt quickly and inexpensively to changes in the curricula, to evolving pedagogical theory and practice, to the demands of the school community, and to the rapid developments in ICT.
- **Multifunctional spaces** for diverse and widespread use by the school community.
- **Safe, accessible and inclusive spaces** that provide users with a healthy environment and support people with restricted mobility and special educational needs.
- **Durable and environmentally efficient solutions** so as to reduce energy consumption as well as management and maintenance costs.

The programme adopts a participative approach to planning and design involving design professionals, educators and school users through a collaborative process of interpretation and negotiation.

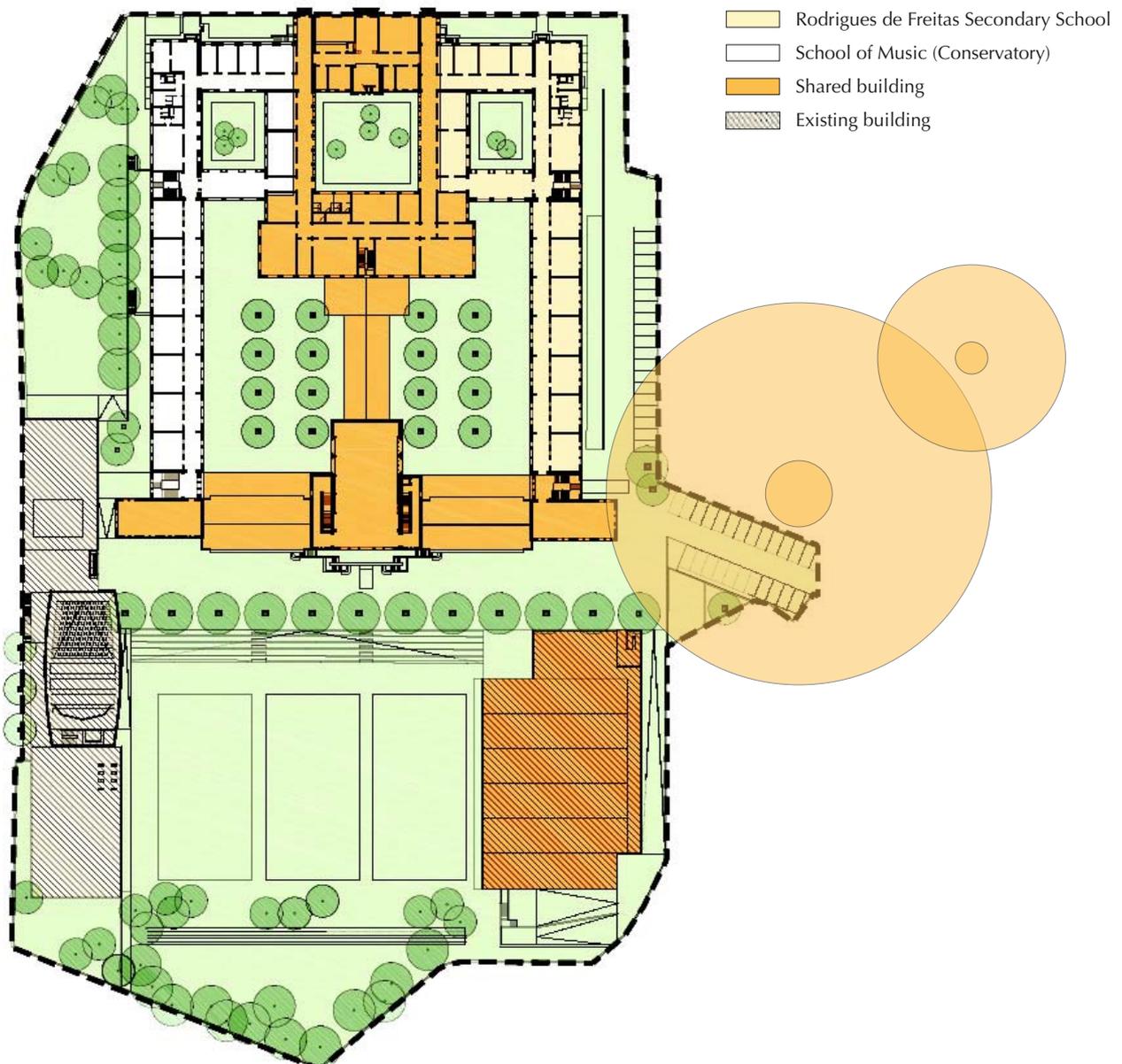
Once a school is selected for the programme, its school board is asked to develop a strategic plan, prioritising the work needed to tackle problems where they exist and to maximise the building's effectiveness over the coming years. Evidence provided by school users through interviews and walkthroughs, together with technical surveys to assess the facilities' physical and environmental condition and suitability, complement this information. Design solutions are later presented and discussed with the school community.

In July 2007 construction work began on four schools in the cities of Lisbon and Oporto and is scheduled for completion by the beginning of the 2008/09 school year; work will begin on an additional 26 schools after July 2008. These projects will serve as pilot schemes to test and assess planning strategies, programme procedures, design principles and concepts.

## PILOT SCHEMES

### Rodrigues de Freitas Secondary School

Built between 1929 and 1935, with small additions made throughout the following decades, this landmark building is recognised for its historic value. The 20 000 m<sup>2</sup> school building offers a basic secondary school programme and a capacity for 1 500 students aged 10 to 17. Currently parts of the building show major defects and are not operating correctly due to neglect. The science facilities, sports facilities and service areas are largely obsolete. External areas are unpleasant, giving the community a negative image of the school. The improvements planned will integrate preparatory and middle-level musical education (Conservatory) with regular education programmes covering Portugal's 2nd and 3rd cycles of compulsory education and upper secondary education, for ages 10 to 18. The school's entire internal space will be reorganised, and a new building will be added to house an auditorium along with other specialised resource areas for the music school and a covered sports facility.



### Soares dos Reis School

This school exemplifies the successful conversion of a former technical school into a secondary vocational school oriented towards artistic education and providing access to higher learning. The building under refurbishment opened in 1968 as a commercial training school preparing 10- to 17-year-old students to enter the job market. It consists of two buildings linked by a covered passageway. The main, three-storey building accommodates common teaching spaces and isolated self-contained classrooms arranged in rows on double-loaded corridors. The canteen and the sports facilities form a second block at the rear of the plot. It is a solid construction, despite some deterioration of the external fabric, but its mechanical and electrical services are obsolete. The internal spaces will be completely redesigned taking into account the curriculum of the arts school, and a new wing will be built to house studios, workshops and other specialised spaces.



### Dom Dinis Secondary School

This is a project to modernise a pavilion-based modular type of school opened in 1972 with a basic secondary school programme and a capacity for 1 000 students age 12 to 17 (this type of school building was reproduced throughout the country during the 1970s). The work planned will serve to combine vocational training with regular education, while continuing to serve 12- to 17-year-olds. The existing internal and external spaces will be remodelled, and a new building connecting the existing pavilions will be constructed. The new building will accommodate the school library/ICT resource area, work spaces for teachers and students, and a multipurpose space which will act as the school's new centre, both physically and functionally.

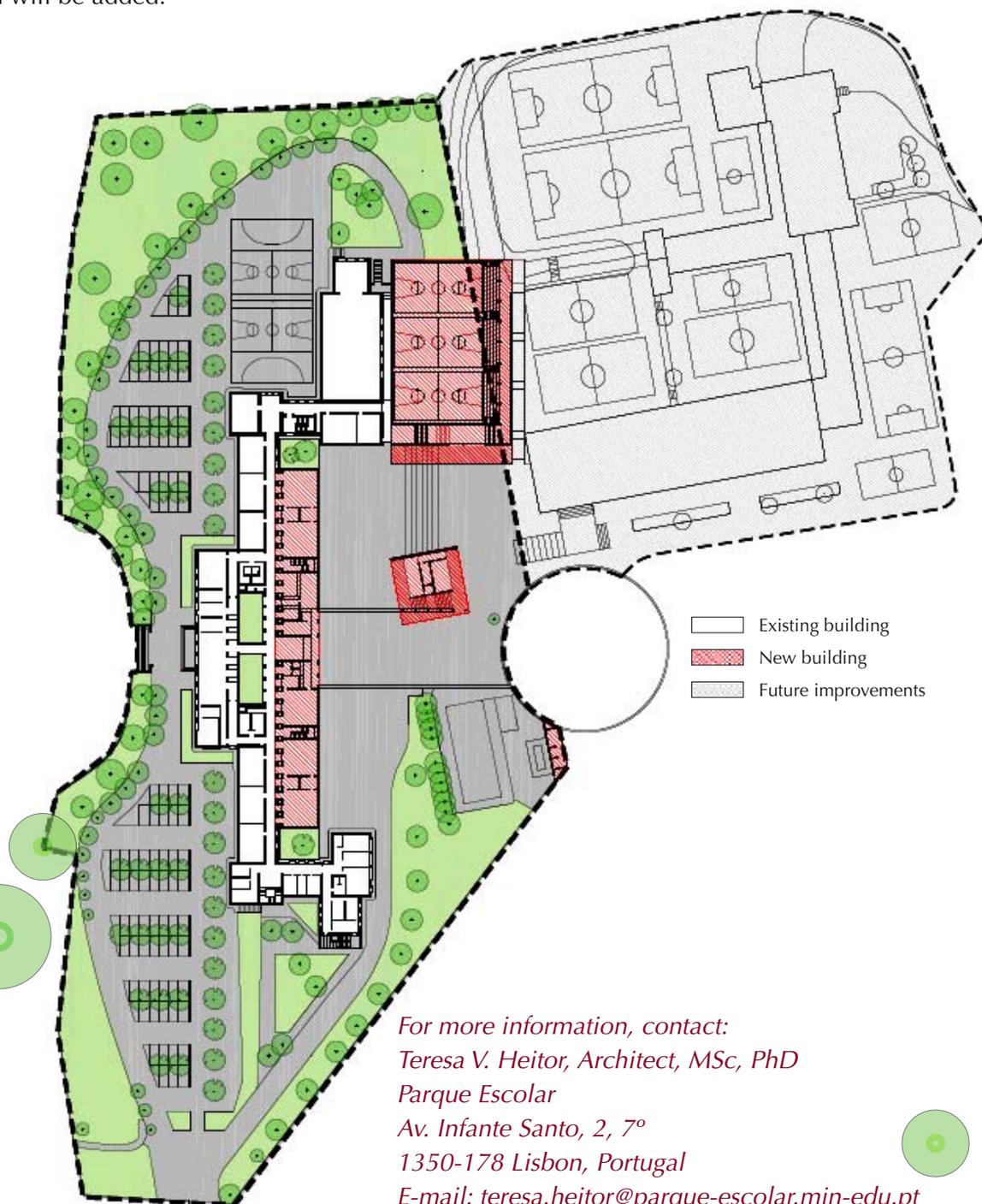


Existing building   
 New building 



### Dom João de Castro Education and Training Centre

This is an example of converting a lower secondary school into one which combines regular education with vocational training oriented towards electronics. The original school opened in 1949 with a capacity of 800 students from age 10 to 17. A new wing will be constructed to accommodate science and electronics laboratories; it will connect to the back of the existing building, creating a new public face for the school. The internal space will be entirely redesigned, and a covered sports facility and a canteen will be added.



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