Water services and sanitation in Brazil: Belo Horizonte

At the end of this Athens week about “European water services and sanitation”, we wanted to present the situation in Brazil and the current issues and future challenges with the case of the city Belo Horizonte in the state Minas Gerais.

The situation in Brazil is indeed very particular because of the climatic, hydrologic and economic diversity of this country.

Belo Horizonte is the capital of the state Minas Gerais, in the region of South-East: it is the 6th biggest city in Brazil with 2.4 million inhabitants (IBGE 2010). Belo Horizonte is a planned city, inaugurated in 1897: the city grew more quickly than expected and extended to become Belo Horizonte Metropolitan Region with 4.6 million inhabitants. A part of Minas Gerais is located in semi-arid area.

Before 1963, Minas Gerais didn’t have a sanitation policy and Water and Sewerage Municipal Departments (DEMAE) were in charge of water supply and sanitation. Conditions of water supply and sewerage were not very good. In order to define and execute a sanitation policy, the state created in 1963 the “Companhia Mineira de Agua e Esgostos” (COMAG) or Water and Sewerage Company of state Minas. In 1973, the state created the first sanitation plan (PLANASA) which defined targets for sanitation and financial resources. In 1974, COMAG merges with the Water and Sewerage Municipal Departments (DEMAE) to become the “Companhia de Saneamento de Minas Gerais” (COPASA) or Minas Gerais Sanitation Company.

COPASA is today a mixed company, in which state of Minas Gerais is the major shareholder, for drinking water and sanitation. COPASA has a quasi monopole in Minas Gerais, where water supply and wastewater are municipal matters.

There is a concession contract between the city of Belo Horizonte and COPASA: price of water services is the same everywhere in the state, and municipalities richer than others have to give money to finance investments in other places.

COPASA in Brazil is in charge of water supply for 13 billion habitants and of wastewater for 8 billion habitants. Its income comes for the three quarters from water supply and for the last quarter from wastewater treatment, even if this sector concentrates the most important investments.
COPASA produce more than 230 million cubic meter drinking water per year, but only 65% are consumed and 35% represented losses. It is a better efficiency than in other places in Brazil (e.g. 60% of losses in Rio) but it could be improved.

The situation is more complicated for the wastewater: only 61% of the produced volume was collected and only 40% was treated in 2009. To improve this situation, a new treatment plant was build in 2010 and should permit to treat the totality of the collected volume.

To conclude, Belo Horizonte has, for the moment, no particular problem of water supply but there are some future challenges : to reduce losses of drinking water, to improve customer service and to modernize operating systems.