

It was pointed out that the change in sensitivity of a single species according to a salinity gradient has been demonstrated and that it is difficult to disentangle natural stress from anthropogenic stress.

#### **4.1.4 Assessing the ecological status within European transitional waters (northeast Atlantic): intercalibrating different benthic indices**

**G. Van Hoey reported on work done by A. Borja, G. Van Hoey, G. Phillips, M. Blomqvist, N. Desroy, K. Heyer, J.-C. Marques, I. Muxika, J. Neto, A. Puente, J. Germán Rodríguez, J. Speybroeck, M. Dulce Subida, H. Teixeira, W. van Loon, J. Witt**

The Water Framework Directive (WFD) has developed several methods to assess the benthic status of European marine waters. The WFD implementation requires the intercalibration of such methods, in order to ensure that the status classification is consistent and comparable across countries and waterbody types. A working group of 9 countries (Portugal, Spain, France, Belgium, Netherlands, Germany, Sweden, Ireland and the UK) has been established to intercalibrate methods in transitional (estuaries) waters, within the northeast Atlantic ecoregion. The following steps for intercalibration were agreed upon by this group:

- (i) to establish common waterbody types across Europe, based on salinity, tidal range, mixing conditions, intertidal area and estuary size (6 common types were identified);
- (ii) to compile a common dataset (9337 samples collated, from 59 estuaries and 8 countries, covering 5 out of the 6 types, and most of the ecotopes);
- (iii) to harmonise the taxonomy of the dataset (using ERMS, WoRMS and Fauna Europaea);
- (iv) to collate human pressures from each estuary;
- (v) to set reference conditions for each type;
- (vi) to calculate Ecological Quality Ratios for each of the 10 methods proposed for intercalibration (BAT, M-AMBI, BOPA, BO2A, QSB, MISS, BEQI, AETV, BQI, IQI);
- (vii) to interpret the response of these methods to different anthropogenic pressures;
- (viii) to determine boundaries for each of the 5 quality class (from bad to high status), using the 10 methods; and
- (ix) final agreement in the assessment and intercalibration.

This contribution presents the steps already taken and the way forward in this intercalibration exercise.

#### **4.1.5 The use of benthic indicators to assess anthropogenic impacts: some cases from Belgium**

**G. Van Hoey reported**

Environmental monitoring and the use of indicators for assessing anthropogenic impacts and the status of the marine environment are topics that get a lot of attention in current scientific research. The basis for this lays in the (recent) implementation of different European Directives, like the Habitat- and Bird Directive, the Water Framework Directive and the Marine Strategy Framework Directive. Policy makers and managers need objective tools to evaluate the impact on the marine ecosystem and to assess the recovery after enforcement of the measures. Three main groups of anthropogenic pressure types are here considered: (1) pollution (e.g. eutrophication, chemi-