

**DVB TM - AHG DVB-S2
Proposed Terms of reference**

Scope of the activities of DVB-S2 ad-hoc group is the definition of an advanced channel coding and modulation scheme for broadband satellite services, adding new tools to DVB-S and DVB-DSNG standards and enabling the delivery of a significantly higher data rate for a given transponder bandwidth and power than the current standards. Other advantages may be the increased service availability through improved link margin and/or increased coverage area.

1. DVB-S2 is an ad-hoc Group of the DVB Technical Module;
2. The group will produce technical specification[s] meeting, as far as technically feasible, the commercial requirements identified by the DVB Commercial Module in doc. CM-373r1;
3. The group will produce a "User Guidelines" document supporting the implementation and the use of the DVBS2 specification[s].
4. The group will optimise the DVBS2 system[s] on the basis of technical end-to-end performance and receiver implementation complexity;
5. The new standard[s] will not undermine DVB-S, DVB-DSNG and DVB-RCS; therefore it will not modify existing standards (DVB-S, DVB-DSNG) or make any existing standardised feature to become invalid; the group will cooperate with AHG GBS in case extensions to DVB-SI come out to be necessary
6. The new standard for broadcast applications will consist in two modes: a non backwards-compatible (NBC) mode and a backwards-compatible (BC) mode, the first being incompatible with current DVB-S receivers, the second delivering a waveform partially decodable by current DVB-S receivers;
7. The new standard applications will support dynamic adaptation of channel coding and modulation if technically feasible and commercially viable
8. The new specification[s] will cover transmit-end functions only, but it will take into account the consequent performance, complexity and cost of receive system
9. According to the Commercial Requirements (CM-373r1), the group will ideally strive for a date of delivery of a technical specification by end 2002. Being the technical work at the edge of new studies and developments, and the number of new tools to be developed quite large (e.g. broadcast and interactive operational modes, BC and NBC modes, various constellations and code rates), the group will prioritise the development of the specification and will submit its work plan to the TM for approval.
10. The group will set up liaisons with bodies and projects outside of DVB investigating advanced coding and modulation schemes for broadband satellite services. This should be done in the context of the normal DVB procedures for liaisons, i.e. via the TM and SB.