Term	Explanation	Advantages	Disadvantages
Obligatory shared language harmonization	The project stipulates that shared language harmonization (in whatever form) must be undertaken.	 Participating locations will be more likely to engage in harmonization procedures. Unnecessary differences have a better chance of being avoided. 	 Obligatory participation might be a real burden on some participants or difficult to realize for scheduling reasons.
Optional shared language harmonization	The project recommends shared language harmonization but does not make it an obligatory requirement.	Recommending rather than requiring shared language harmonization might be a more realistic requirement in some contexts.	 A recommendation may not be enough to ensure countries engage in the additional effort required. Unnecessary differences across versions and negative effects on measurement may result.
Full shared language harmonization	The project aims to produce a single language version to be used for all the locations using that language.	• The wording of the questions is the same in each location.	The "same" wording may be systematically understood differently in different locations, not understood in one or more locations, or even not be correct in some locations.
Optimized shared language harmonization	The project aims to harmonize as much as possible, but to permit local divergence from the shared wording as necessary. Harmonization is pursued only to the degree to which it optimizes comparability.	 As much as possible is kept common but needed differences are permitted. 	 Teams may have difficulty distinguishing between their preferences and what are really required differences. This holds for bottom-up and top-down approaches. Teams may lack experience in harmonization decision-making. This holds for bottom up and top-down approaches. Therefore, it is of utmost importance to have (a) native speakers living in the respective countries and experienced in dealing with linguistic issues, and (b) people experienced in shared language harmonization in all teams.

Top-down approach (localization from single version)	A single target language version is first produced (this may also be called 'master version'). This is then adjusted as necessary for the different varieties of the target language. Production of the single version should take into consideration the needs of the different language varieties to be accommodated. The team translation procedures described in Translation: Overview would be useful for this.	•	By beginning with a shared common version or 'master' version, locations may end up with more shared common (or more similar) wording than by using a bottom-up approach. Teams may lack experience in harmonization decision-making, especially if the teams are new; however, in long- standing and long-running projects, the translating teams may be quite experienced in shared language harmonization. This holds for bottom-up and top-down approaches	•	The success of the single translation in anticipating and accommodating needs of different locations can determine how much of the translation is left intact. If the single translation meets with opposition from many groups/locations involved with respect to many components, this will greatly complicate the harmonization effort. The fact that one translation (and only one) is on the table may make it harder to spot where differences are needed. People might not propose alternatives they would have seen if each location had made an independent translation. Shared wording might not mean shared understanding or comparable measurement.
Bottom-up approach (shared language harmonization of different versions)	Each location produces an initial translation (ideally the TR, or, if possible, TRA steps from the TRAPD model). A good version produced on the basis of team translation prior to pretesting should suffice (see Translation: Overview). These translations form the basis of the harmonization review.	:	Every location has already worked in-depth on the source questionnaire and considered an optimal version for their location. The initial translation coming from each location has already been worked upon by a team (typically the T-R-A steps have been carried out at national level before going into the harmonization step). The harmonization review has all the alternatives at its disposal to decide commonalities, possibly find new solutions in the shared language and determine and document needed differences.	•	Locations may be unwilling to produce a draft translation that is ultimately changed again. Locations might over-perceive the need to retain their versions. Teams may have difficulty distinguishing between their preferences and what are really required differences. This holds for bottom-up and top-down approaches. Depending on the project and the team composition, teams may lack experience in harmonization decision-making. This holds for bottom-up and top-down approaches.