Proposal for C2x
WG14 N2122

Title:	TS 18661-5 reproducible results
Author, affiliation:	C FP group
Date:	2017-03-05
Proposal category:	New features
Target audience:	Reproducible results

Abstract: This proposal incorporates the support for reproducible results, including the pragma and the list of properties of reproducible code, into C2x, as prescribed in ISO/IEC TS 18661-5. The pragma provides the reproducible results attribute recommended by the current IEC 60559 floating-point standard (2011). A code block that uses the pragma and adheres to the properties can produce results that are exactly reproducible on conforming platforms. The pragma has the same form and scope as the standard floating-point pragmas in current C. Other proposals cover the other features in TS 18661-5.

Dependency: As written, this proposal depends on the evaluation format and optimization control pragmas in TS 18661-5.

Prior art: This feature consolidates widely available implementation-specific controls and documentation to promote reproducible results.