

JTC1/SC22/WG14 N3144

Title: Underspecified Declarations

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Suggested alternative text changes to address DE-49 and GB-50:

6.7 Declarations

Constraints

~~5 In an underspecified declaration all declared identifiers that do not have a prior declaration shall be ordinary identifiers.~~

Semantics

12 A declaration such that the declaration specifiers contain no type specifier or that is declared with `constexpr` is said to be underspecified. If such a declaration is not a definition, if it declares no or more than one ordinary identifier, if the declared identifier already has a declaration in the same scope, ~~or~~ if the declared entity is not an object, **or if anywhere within the sequence of tokens making up the declaration identifiers that are not ordinary are declared**, the behavior is **undefined implementation-defined**.XXX)

XXX) It is recommended that implementations that accept such declarations follow the semantics of the corresponding feature in ISO/IEC 14882.

6.7.9

NOTE 1 ~~Such~~ A declaration that also defines a structure or union type **has implementation defined behavior** ~~violates a constraint~~. Here, the identifier `x` which is not ordinary but in the name space of the structure type is declared.

```
auto p = (struct { int x; } *)0;
```

Even a forward declaration of a structure tag

```
struct s;  
auto p = (struct s { int x; } *)0;
```

would not change that situation. A direct use of the structure definition as the type specifier ensures **the validity portability** of the declaration. **The following is also implementation-defined:**

```
auto alignas (struct s *) x = 0;
```

6.7.1

22 EXAMPLE 6 Because declarations using `constexpr` are underspecified, the following is implementation-defined because tokens within the declaration declare `s` which is not an ordinary identifier:

```
constexpr typedef (struct s *) x = 0;
```