

Notes of the:

**Meeting of Ecma TC39 ad hoc on
Internationalization**

held on:

17 January 2012

Location: Google, Mountain View, CA, USA

Attendees: Nebojša Ćirić, Jungshik Shin, Roozbeh Pournader, Mark Davis (Google), Eric Albright (Microsoft), Allen Wirfs-Brock (Mozilla), Norbert Lindenberg, Nicholas C. Zakas (no affiliation).

Minute taker: Nebojša Ćirić, Norbert Lindenberg

Materials: [Current specification draft](#); es-discuss: [October](#), [November](#), [December](#), [January](#); [Minutes of 2011-11-15 meeting](#); [Norbert's proposal for DateTimeFormat patterns and styles](#); [Norbert's guide](#)

1 Agenda

1.1 Technical Issues

- Module instead of global object
- Default locale list, locale list within options, Locale object
- DateTimeFormat patterns and styles
- Normalization

1.2 Project Issues

- Implementations
- Conformance test suite

2 Minutes

2.1 Module instead of global object

- More complex loading for ES5 based applications (Check for Object.system, load the module)
- We agree to use ES6 style modules for globalization library
- Module name is going to be @intl (other options: @internationalization, @globalization)

2.2 Default locale list, locale list within options, Locale object

- Changeable global locale is security issue and can create conflicts between pages and embedded components (applets, ads).
- Discussed alternatives for managing locale list:
 - Let applications/frameworks manage it
 - Keep default list in object derived from module object
 - ```
var intl = Object.System.load("@intl");
var myIntl = intl.create(localeList);
var collator = new myIntl.Collator(options);
```
  - Since we can't provide a complete internationalization solution anyway (localized resources, e.g., can't be done based on just ES5, and libraries such as YUI, Dojo, and Closure have come up with very different solutions), it's better to just provide building blocks, which libraries can integrate.

- Discussed whether to make locale list part of options
  - Without a reasonable default, the locale list is pretty much required, so it should remain a separate argument.

## 2.3 Normalization

There was a suggestion on es-discuss@ to add normalization to version 1 of the globalization API → not for 1.0, but probably for 2.0.

## 2.4 DateTimeFormat patterns and styles

Nicholas Zakas and other people have suggested that DateTimeFormat should allow the specification of a format via a pattern, providing more detailed control and making it easier to store the spec in a resource bundle. In response, Norbert proposed to replace the current 9 component options with simplified pattern and style options.

Mark reminded the meeting that this project has been going on for 1.5 years, that we have been going back and forth several times on DateTimeFormat specifications, and that the current spec was all that Microsoft would commit to.

→ We'll stick with the current specification.

## 2.5 Implementations

Google is planning to start V8 implementation end of January. Microsoft demoed a prototype version at November TC 39 meeting.

## 2.6 Conformance test suite

Not started yet; need to discuss with David Fugate.