



INSPIRE seeks to make European SDI more accessible and interoperable. This goal is shared by the [Maps For HTML Community Group](#) (Maps4HTML CG), which aims to reduce the technical barriers to interoperability of spatial information to as close to none as is possible in today's Web.

## Wide adoption and use

To lower barriers to use spatial information, Maps4HTML seeks to change the skill level required to create Web maps. SDI standards target professional GIS developers, assuming years of domain experience. This makes creation of even simple maps too complex. Without sophisticated and often proprietary platforms, Web mapping is out of reach of beginners; most people are beginners at mapping.

Web standards for beginners centre on **HTML**, which has only vestigial support for maps left over from the early days of the Web. Despite recent efforts towards standardization within INSPIRE, OGC, FOSS4G and other communities, maps are **still** not part of the core of standards for the Web.

To better support beginners and consequently broaden adoption and use of SDI, INSPIRE should help contribute maps to the standards of widest adoption: Web standards, especially **HTML**.

## Technology

To pivot towards the beginner, we need to think about how to extend **HTML** to support maps.

[Map Markup Language](#) (MapML) is a [simple](#) declarative document format which enables stateless map semantics and interaction on the Web. It is openly and collaboratively developed by the Maps4HTML CG and the OGC.

## Architecture

MapML is designed to conform to [Web architecture](#), especially concerning [media types](#) and [hypertext](#). It adheres to the [Principle of Least Power](#). By agreeing on map semantics in hypertext, indirect (loose) coupling between adopters is enabled. It is this loose coupling which allows the HTML Web to “scale”, and it will do the same for spatial information.

## Main Components

“MapMLification” of [existing map services](#) is [easy](#). Browsers process MapML, first through [Custom Elements](#), and later through [native integration](#).

## Process

The success of new systems on the Internet hinges on leveraging existing content to the greatest possible degree. The SDI exists; the challenge is to optimize its use by lowering the barriers to using it.

Adapting standard interfaces (WMS, WFS, and WMTS) to the existing content (by supporting MapML) will minimise conversion costs and optimise expenditures.

Standardise the <map> (or a new) element to support community requirements. To achieve this, spatial community collaboration and integration with the [W3C](#) and [browser community](#) is essential.