

FSDF Positioning Theme Roadmap

Currently funded and included in work programs

Required to meet outcome, but not yet funded nor included in work programs of custodians / sponsors

Goals


Outcomes against Areas of Focus

2015

2016

2017

Future Status

Area of Focus	2015	2016	2017	Future Status
Quality <ul style="list-style-type: none"> Nationally consistent National Positioning Infrastructure and datum which underpins all positioning in Australia. Accurate and traceable connection to the International Terrestrial Reference Frame (ITRF). Supports positioning with horizontal coordinate uncertainty better than 2cm and vertical coordinate uncertainties better than +/- 5 cm while meeting other user requirements. Supports international best-practice approaches to coordinate uncertainty modelling. Fully three dimensional and tightly coupled with an improved national geoid model. Coverage includes mainland Australia, Tasmania, external territories and the maritime jurisdiction. 	<ul style="list-style-type: none"> Establish a mechanism for the NPI user community to provide input on their requirements for accuracy, integrity, timeliness and availability National adjustment for GDA2020 is operational National transformation grids from GDA94 to GDA2020 developed New geoid model developed 	<ul style="list-style-type: none"> Incorporation into NPI of state/territory investment in positioning infrastructure 	<ul style="list-style-type: none"> New GNSS analysis capability developed 	<p>Development of the new series of national datum, and enhancement and maintenance of a national real-time Global Navigation Satellite System (GNSS) positioning capability which will provide real-time positioning with 2cm accuracy.</p> <p>Precision positioning will contribute 2.1% of Australia's GDP by 2030, and will support automated mining, driverless cars, subsidence mapping, and navigation of unmanned aerial vehicles.</p> <p>Positioning will continue to provide the reference frame for the collection and management of other foundation spatial datasets.</p> <p>Sponsor:</p> 
Supply Chain <ul style="list-style-type: none"> Automated geodetic data sharing between jurisdictions. Implements an approach to more sophisticated management of geodetic information based on input measurements rather than simply by output coordinates Cooperative Research Centre on Spatial Information – Program 1 outcomes incorporated into development of GDA2020 and ultimately a reference frame based spatial referencing system 	<ul style="list-style-type: none"> Research to underpin datum development National governance framework implemented - agreements in place to ensure data sharing between jurisdictions 	<ul style="list-style-type: none"> Automated data sharing and product delivery implemented in all jurisdictions via eGeodesy 	<ul style="list-style-type: none"> Options for private sector collaboration developed 	
Delivery <ul style="list-style-type: none"> Adopt an automated machine-to-machine approach for the exchange of geodetic measurements and information between each of the Australian jurisdictions, the private sector and public. Easily integrate with web-services to enable the delivery of geodetic products and services to the mass-market. Fully supported by a range of technical and non-technical user resources provided in advance of formal datum adoption. 	<ul style="list-style-type: none"> Business case articulating drivers, costs and opportunity costs associated with datum upgrade Development of GDA2020 technical manual Development of NPI Strategic Plan 		<ul style="list-style-type: none"> Options for delivery of national GNSS corrections documented 	
Policy <ul style="list-style-type: none"> National positioning services continue to be made available under open and low cost policies. Resellers can augment this service as opportunities arise. 	<ul style="list-style-type: none"> No change to existing open and low cost policy. 			
Engagement <ul style="list-style-type: none"> Enable users to contribute measurements. Fully supported by a range of technical and non-technical user resources provided in advance of formal datum adoption Widespread adoption. 	<ul style="list-style-type: none"> Establish datum implementation group. User engagement plan Communication tool to explain datum change to industry and the public 	<ul style="list-style-type: none"> Reference groups continue to update user requirements 	<ul style="list-style-type: none"> Reference groups continue to update user requirements 	