

WESTPORT - WORK STREAMS

Stage 1				
Setting the context, Westport hypotheses and supply chain options shortlisting (to be completed by October 2018)				
Work Package/Stream	Skills needed	Overview	Reference Group Members Contributors based on information from 1 st meeting	Reference Group Members Reviewers based on information from 1 st meeting
<p>(1) Trade Task: Identify the trade task for all commodities (e.g. containers, livestock, cruise ships etc) over a range of time horizons and growth scenarios</p>	<ul style="list-style-type: none"> • Economic and Financial forecasting local and International • Market Analysis 	<ul style="list-style-type: none"> • This Work Package will describe current and future demand/supply at the Fremantle, Bunbury and Kwinana ports. • Future demand/supply will be forecasted taking into account population trends and economic drivers (i.e. mining, etc) • Part 1 of this work package will describe: <ul style="list-style-type: none"> ○ Current and future: <ul style="list-style-type: none"> ▪ Infrastructure ▪ Characteristics of the commodities ▪ External influences (global, politics and economic trends) • Part 2 of this work package will describe: <ul style="list-style-type: none"> ○ Growth scenarios over different time periods/population (High, low, Medium) ○ Populations trend, purchasing trends • Previous work undertaken by Deloitte is relevant to this deliverable. 		
<p>(2) Constraints and Opportunities: Describe the social, environmental, operational and economic constraints around Fremantle, Kwinana and Bunbury</p>	<ul style="list-style-type: none"> • Coastal engineer • Marine and terrestrial scientist • Social/economic analyst • Defence expert • Land and transport planner 	<ul style="list-style-type: none"> • Description of Constraints at each of the Fremantle, Kwinana and Bunbury ports: <ul style="list-style-type: none"> ○ Biophysical ○ Infrastructure ○ Operational (eg Alcoa access) ○ Economic ○ Social (incl. recreation) ISCA Frameworks relevant to all Work Packages 	<ul style="list-style-type: none"> • City of Kwinana • Cockburn Sound Management Council (TBC) • Kwinana Industries Council • PATREC • Rail Tram and Bus Union • RecFish West • South West Group • WA Marine Science Institute • Water Corporation (TBC) • Western Harbours Alliance 	<ul style="list-style-type: none"> • Chamber of Minerals and Energy • City of Fremantle • DP World • Maritime Union of Australia • Member for Kwinana (Hon Roger Cook's rep) • South West Group • Transport Workers' Union
<p>(3) Supply chain: Describe the characteristics of an efficient logistics supply chain from port to user (WA context commercial and operations)</p>	<ul style="list-style-type: none"> • Transport Planning • Global logistics (Ship sizes) • Sustainability • Literature research • Land use planning • Peer review 	<ul style="list-style-type: none"> • Understanding world's best practice supply chain requirements for commodities (containers, scrap, livestock, bulk, cars, etc) • This includes: <ul style="list-style-type: none"> ○ distribution networks ○ operational models ○ learning from weaknesses in other supply chains Apply logistic chain to the hypotheses and options 	<ul style="list-style-type: none"> • Arc Infrastructure • Chamber of Minerals and Energy • City of Armadale • City of Fremantle • City of Kwinana • Department of Primary Industries & Reg Dev • Eastern Metropolitan Region Council • Freight and Logistics Council • Kwinana Industries Council • Livestock and Rural Transport Association • Maritime Union of Australia • PATREC • Rail Tram and Bus Union • Shire of Serpentine Jarrahdale • South West Development Commission • South West Group • Southern Ports Authority • WA Livestock Exporters Association 	<ul style="list-style-type: none"> • Australian Marine Complex Common User Facility • City of Gosnells • DP World • Mediterranean Shipping Company • Member for Kwinana (Hon Roger Cook's rep) • RecFish West • Transport Workers' Union
<p>(4) Port capability: Describe the operational capability, capacity and constraints of Fremantle, Kwinana and</p>	<ul style="list-style-type: none"> • Economic planning • Transport planning • Port planning 	<ul style="list-style-type: none"> • This Package will look at the ultimate capacity of Fremantle, Kwinana and Bunbury with the existing infrastructure 	<ul style="list-style-type: none"> • Australian Marine Complex Common User Facility • Chamber of Minerals and Energy 	<ul style="list-style-type: none"> • Arc Infrastructure • Livestock and Rural Transport Association • Maritime Union of Australia

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Bunbury, and implications in the supply chain	<ul style="list-style-type: none"> Road/rail/IMT (Buffer study) land and transport planner Peer review 	<ul style="list-style-type: none"> Fremantle: All trades Kwinana: Bulk trades Bunbury: All trades Infrastructure capacity constraints in relation to each of the port (Kwinana, Fremantle, Bunbury): Rail, road, IMT, utilities, Port areas, Describe How we measure against the world's best practice described in work package 3 Part 1 of this work package is the current capabilities Part 2 future capabilities 	<ul style="list-style-type: none"> City of Fremantle City of Kwinana DP World Freight and Logistics Council Kwinana Industries Council PATREC Patrick Stevedores Rail Tram and Bus Union RecFish West South West Development Commission Southern Ports Authority Water Corporation 	<ul style="list-style-type: none"> Mediterranean Shipping Company Member for Kwinana (Hon Roger Cook's rep) Transport Workers' Union WA Livestock Exporters Association
<p>(5) Westport Hypotheses: Develop and rank a range of options mixing port locations, commodities and infrastructure and develop criteria to rank them</p>	<ul style="list-style-type: none"> Collation of information Facilitation Peer Review Permutations Agreed land and transport planner Peer review 	<ul style="list-style-type: none"> Part 1 of this work package Identify different hypotheses in relation to port functions and locations (including supply chain and concept land requirements) Part 2 of this work package Develop high level test criteria for next step taking into account from work package (2) ISCA topics areas and also other relevant criteria to inform work package (6). During the development of this work package is necessary to engage the Reference Groups to gather information in relation to assessment criteria. 	<p>All Reference Group members Workshop 25/06/2018 (TBC)</p>	
<p>(6) Shortlisting Options: Identify a shortlist of supply chain options from the Westport Hypotheses</p>	<ul style="list-style-type: none"> Port Planning Coastal engineering Geotechnical Quantity Surveyor (order of magnitude cost) land and transport planner Peer review Part A: Port Part B: Hinterland 	<ul style="list-style-type: none"> This is what we have found so far report August deadline Describe layouts, concepts, port concept land requirements and hypotheses selection and provide more detailed information about the shortlisted options Develop and apply criteria to test the hypotheses identified in work package (5) Develop a ranking system (Sense check) 	<p>All Reference Group Members to be informed before publishing <i>Report: How will we assess the options?</i></p>	

Stage 2

Options Assessment (this stage will include the MCA) what are we going to do about it? And how are we going to deliver it? (Sept 2019)

Work package/ Work Stream	Skills needed	Overview	Reference Group Members based on information from 1st meeting	Reference Group Members Reviewers based on information from 1st meeting
<p>(7) Environmental: Identify the marine and terrestrial environmental issues associated with each shortlisted option</p>	<ul style="list-style-type: none"> Environmental specialist (marine and terrestrial) Social (recreation, others) Geotechnical Land use planning Peer review 	<ul style="list-style-type: none"> The environmental component of this work package will commence early to work out if there are fatal flaws in the Cockburn Sound. This work package will identify the baseline environmental information associated with Fremantle, Kwinana and Bunbury. 	<ul style="list-style-type: none"> City of Kwinana Cockburn Sound Management Council (TBC) Kwinana Industries Council Rail Tram and Bus Union RecFish West South West Group WA Marine Science Institute (WAMSI) Water Corporation (TBC) Western Harbours Alliance 	<ul style="list-style-type: none"> Chamber of Minerals and Energy City of Fremantle DP World Maritime Union of Australia Member for Kwinana (Hon Roger Cook's rep) South West Group Transport Workers' Union

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<p>(8) Port Operations and Connectivity: Determine the operational considerations and landside connections associated with each shortlisted option</p>	<ul style="list-style-type: none"> • Logistics (network operations, commercial operations) • Environmental • Defence • Land use planning (including buffer and engineering input re utilities) • Transport Planning (IMT, Rad and Rail) • Transport modelling • Social impact assessment • WA Commercial • Peer review 	<ul style="list-style-type: none"> • This work package will identify operational requirements such as landside connections and physical aspects for each of the Westport options 	<ul style="list-style-type: none"> • Arc Infrastructure • Aust Marine Complex Common User Facility • Chamber of Minerals and Energy • City of Fremantle • City of Kwinana • DP World • Freight and Logistics Council • Kwinana Industries Council • PATREC • Patrick Stevedores • Rail Tram and Bus Union • RecFish West • South West Development Commission • Southern Ports Authority • Water Corporation 	<ul style="list-style-type: none"> • Arc Infrastructure • Livestock and Rural Transport Association • Maritime Union of Australia • Mediterranean Shipping Company • Member for Kwinana (Hon Roger Cook's rep) • Transport Workers' Union • WA Livestock Exporters Association
<p>(9) Opportunities: Identify and describe environmental, social, operational, economic and commercial, opportunities of each shortlisted option</p>	<ul style="list-style-type: none"> • Coastal engineer • Marine and terrestrial scientist • Social/economic analyst • Defence expert 	<ul style="list-style-type: none"> • This work package will explore what opportunities each of the Westport options generates and how they add value. At first this WP will describe general opportunities that we may capture and later it will define those opportunities associates to the Westport options. 	<ul style="list-style-type: none"> • Australian Marine Complex Common User Facility • Bunbury Geographe Growth Plan Partnership • Chamber of Commerce and Industry (TBC) • Chamber of Minerals and Energy • City of Armadale • City of Gosnells • City of Kwinana • Department of Primary Industries & Reg Dev • Eastern Metropolitan Region Council • Freight and Logistics Council • Kwinana Industries Council • Maritime Union of Australia • Shire of Serpentine Jarrahdale • South West Development Commission • South West Group • Southern Ports Authority • Western Harbours Alliance 	<ul style="list-style-type: none"> • Member for Kwinana (Hon Roger Cook's rep) • RecFish West • Transport Workers' Union
<p>(10) Commercial Estimate an order of magnitude cost for developing each shortlisted, describing timing horizons associated funding, finance, transition and governance models</p>	<ul style="list-style-type: none"> • Economic • Financial • Commercial • Peer review 	<ul style="list-style-type: none"> • This Work Package will identify the "order of magnitude" costs as well as the staging, funding and governance models for each of the Westport 	<ul style="list-style-type: none"> • Arc Infrastructure • Aust Marine Complex Common User Facility • Bunbury Geographe Growth Plan Partnership • Chamber of Commerce and Industry (TBC) • Chamber of Minerals and Energy • City of Armadale • City of Gosnells • City of Kwinana • Department of Primary Industries & Reg Dev • Eastern Metropolitan Region Council • Freight and Logistics Council • Kwinana Industries Council • Maritime Union of Australia • Shire of Serpentine Jarrahdale • South West Development Commission • South West Group • Southern Ports Authority • Western Harbours Alliance 	<ul style="list-style-type: none"> • Chamber of Minerals and Energy • DP World • Mediterranean Shipping Company • Member for Kwinana (Hon Roger Cook's rep) • RecFish West • Transport Workers' Union • WA Livestock Exporters Association