

# Annexure M

## Works Breakdown Structure (Rail)

WBS Level 1	WBS Level 2	WBS Level 3	WBS Level 4	Description
10000	<b>Client Costs</b>			
	<b>10300</b>	<b>Client Costs – Develop Options</b>		
		10309	Rail Traffic Analysis and Report	
		10310	Engineering Survey	
		10311	Existing Rail System Survey	
		10341	Platform / Station Design	
		10350	Track Design	
		10351	Concept Signal and Telecommunications Design	
		10352	Concept Track Power Design	
		10353	Concept Power Overhead Design	
		10354	Concept Cable Design	
		10355	Concept Enabling Works Design	
		10360	Preliminary Design – Layouts and Planning Design	
	<b>10500</b>	<b>Client Costs – Develop Options</b>		
		10509	Rail Traffic, Analysis and Report	
		10510	Engineering Survey	
		10511	Existing Rail Systems Survey	
		10542	Platform / Station Design	
		10550	Track Design	
		10551	Preliminary Signal and Telecommunications Design	
		10552	Preliminary Track Power Design	
		10553	Preliminary Power Overhead Design	
		10554	Preliminary Cable Design	
		10555	Preliminary Enabling Work Design	
		10560	Preliminary Layouts and Planning Report	
	<b>10600</b>	<b>Development Phase – Detailed Design</b>		
		10609	Rail Traffic Analysis and Report	
		10610	Engineering Survey	
		10611	Existing Rail Systems Survey	
		10641	Platform /Station Design	
		10650	Track Design	
		10651	Signal and Telecommunications Design	
		10652	Track Power Design	
		10653	Power Overhead Design	
		10654	Cable Design	
		10655	Enabling Works Design	
		10660	Design layouts and Planning Report	

WBS Level 1	WBS Level 2	WBS Level 3	WBS Level 4	Description
<b>40000</b>	<b>Construction Costs</b>			
	<b>41200</b>	<b>Rail</b>		
		<b>41201</b>	<b>Track</b>	
			41201-01	Track works – includes materials, ballast and construction
			41201-02	Other – items such as GIJs
		<b>41202</b>	<b>Turnout</b>	
			41202-01	Turnouts – includes materials, ballast, Point Machines, construction and testing
			41202-02	Other – items
		<b>41203</b>	<b>Signalling</b>	
			41203-01	Track and DEDs
			41203-02	Signals
			41203-03	Equipment Housings
			41203-04	Interlocking
			41203-05	Modifications to Locations and SER
			41203-06	Signal Power
			41203-07	Other
			41203-01	Track and DEDs
		<b>41204</b>	<b>Telecommunications</b>	
			41204-01	Telecommunications Equipment Room
			41204-02	Transmission Network
			41204-03	Data Networks
			41204-04	Network Control Communications Systems
			41204-05	Wireless Infrastructure
			41204-06	Wayside Infrastructure
		<b>41205</b>	<b>Cable Supply and Installations</b>	
			41205-01	Cable Route Installation
			41205-02	Cable Supply and Install
			41205-03	UTX
		<b>41206</b>	<b>Power Supply</b>	
		<b>41207</b>	<b>Power – Overheads</b>	
			41207-01	OHLE Catenary and Portals
			41207-02	Motorised Isolators
			41207-03	OPGW
		<b>41208</b>	<b>Fencing and Gates</b>	
		<b>41209</b>	<b>Stabling Yards</b>	

WBS Level 1	WBS Level 2	WBS Level 3	WBS Level 4	Description
		<b>41211</b>	<b>Roadworks</b>	
			41211-01	Access Roads
		<b>41211</b>	<b>Commissioning</b>	
	<b>41300</b>	<b>Major Structures</b>		
		<b>41301</b>	<b>Pedestrian Footbridge / Underpasses</b>	
	<b>41400</b>	<b>Buildings</b>		
		<b>41401</b>	<b>Station Platform</b>	
		<b>41402</b>	<b>Station Buildings</b>	
		<b>41403</b>	<b>Carparks</b>	
		<b>41404</b>	<b>Lighting</b>	