Product development process - schedule illustration

Milestone		Complexity ->	Duration in weeks Low	Medium	High
RD	**Requirements Defined phase** Commercial specification (includes info on target destination markets) to be translated into technical requirements such as applicable regulatory standards & their parameters, customer-specified quality standards, commercial requirements such as limits for noise, cost & mass limits etc.		**1**	**1**	**3**
	Feasibility assessment May be required if product involves new or unproven technology.		**0**	**0**	**3**
CS	**Concept Selection phase** A number of concepts would be generated and short-listed to 3-5. May require the manufacture of "appearance" block models etc. Particularly applicable if Industrial Design is required. Would need to show how visual language works in different deployment / mounting scenarios if relevant.		**0**	**2**	**4**
CR	**Concept Ready phase** Chosen concept is developed further and all aspects considered - industrial design, cost, manufacturability, tolerancing etc. Would usually involve detailed thermal management study. At this point the chosen concept must show how all specified requirements will be met. Detail design commences after this milestone.		**1**	**2**	**4**
FA	**Functional Agreement phase** The first deliverable after Concept Ready (CR) is the board constraints file. Layout commences. Detail design continues.		**1**	**2**	**2**
SR	**Sample Review phase**		**5**	**10**	**13**
	Detail design continues to a point whereby 3D files are available for build		*2*	*4*	*5*
	Prototype build Prototypes are built - likely to include the manufacture of plastic housings, dummy boards & labels.		*2*	*3*	*4*
	Prototype test May wish to perform some basic confidence tests: Airflow / thermal, Shock / Vibration, EMC etc.		*0*	*2*	*3*
	Sample Review Milestone at which all prototype build & test is assessed.		*1*	*1*	*1*
PA	**Physical Agreement phase** Preparation of Manufacturing Documentation - piece-part drawings - assembly documentation - stock lists / BOM		**1**	**2**	**3**
	Production tooling Typical duration for plastic Injection Mouldings		**6**	**8**	**12**
	Assembly & test		**2**	**2**	**4**
	Regulatory approval		**6**	**8**	**12**
MR	**Manufacture Ready phase**		**1**	**1**	**2**
		Typical duration in weeks ->	**24**	**38**	**62**