

## Activity 2

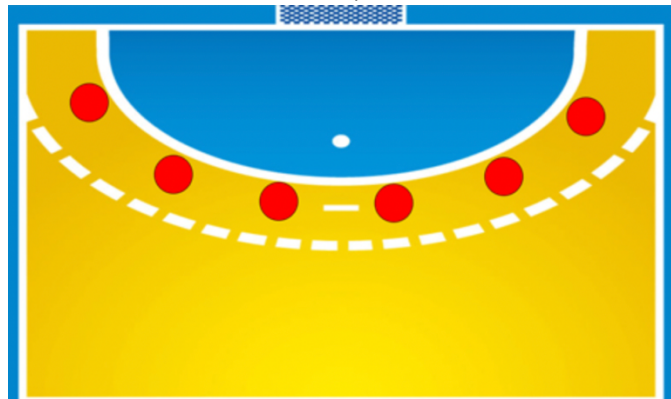
Outcome: We want to capture the (physical) “cost” of implementing different defensive organizations, for .

Data: <https://github.com/komarjoh/ComplexSportsData>

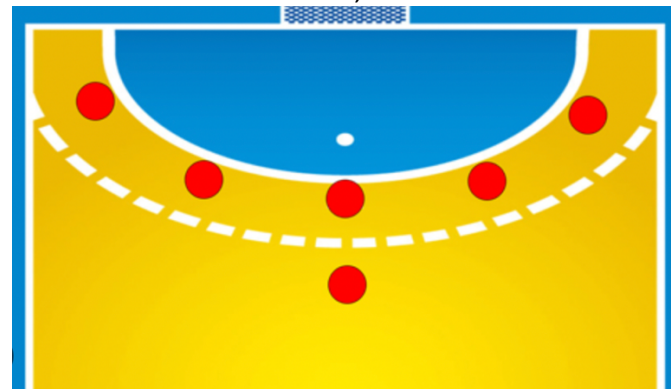
➔ Download the file “X\_Y\_final.csv”

➔ Connect to the Colab ComplexSportsData2023.ipynb

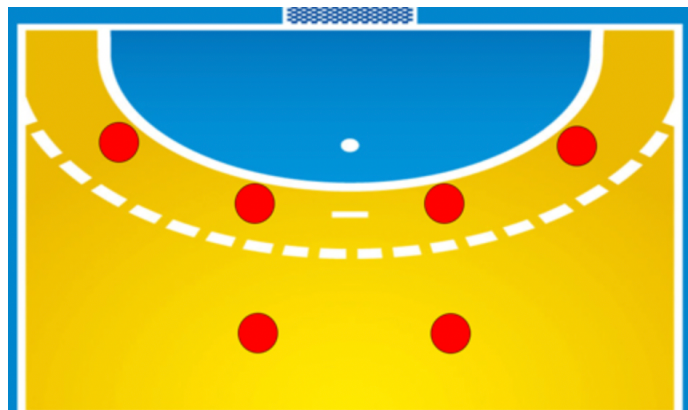
- 1) Same ranges as 1.A.
- 2) We need to identify and label the defensive phases
- 3) We need to label the players’ position
- 4) For each defensive phase, we need to label the defensive organization that was used:
  - a. **0-6:** 6 defenders below 9 meters, 0 defender out of the 9 meters



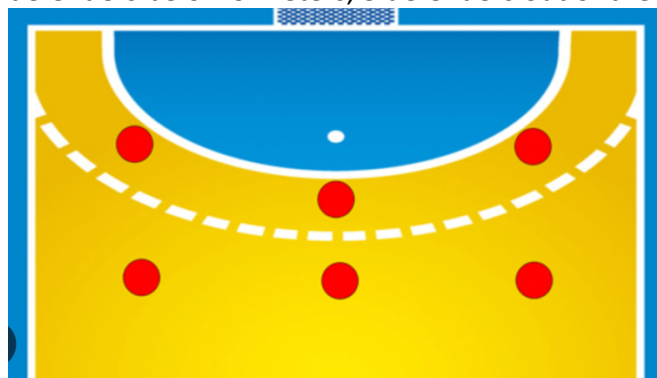
- b. **1-5:** 5 defenders below 9 meters, 1 defender out of the 9 meters



- c. **2-4:** 4 defenders below 9 meters, 2 defenders out of the 9 meters



d. **3-3**: 3 defenders below 9 meters, 3 defenders out of the 9 meters



PS: an example view of the results.

Defense	Role		Stand (m)	Walk (m)	Jog (m)	Run (m)	Sprint (m)	Sprints (n)	Deceleration (n)
0-6	wing	M	0.00	722.42	65.75	9.88	10.83	7.28	360.00
		SD	0.01	100.43	30.37	15.56	29.43	25.85	45.00
	back	M	0.00	904.50	88.72	11.53	2.02	0.16	413.68
		SD	0.00	166.80	47.90	42.71	10.12	0.80	70.30
	line	M	0.00	277.30	32.37	0.65	0.35	0.04	127.08
		SD	0.00	116.13	18.92	1.39	1.73	0.20	56.29
	Total	M	0.00	1904.22	186.84	22.05	13.20	7.48	900.76
		SD	0.01	159.18	60.25	43.48	38.50	26.58	73.05
1-5	wing	M	0.00	724.46	75.84	9.39	3.86	0.36	353.20
		SD	0.00	90.60	29.30	11.30	7.72	0.70	40.75
	back	M	0.00	870.19	102.24	8.72	0.31	0.04	402.60
		SD	0.00	168.91	64.10	20.02	1.54	0.20	75.40
	line	M	0.00	262.25	27.63	0.46	0.00	0.00	122.12
		SD	0.00	126.54	19.79	1.24	0.00	0.00	55.68
	Total	M	0.00	1856.90	205.71	18.57	4.17	0.40	877.92
		SD	0.00	161.12	78.35	23.86	7.72	0.71	65.25
2-4	wing	M	0.01	741.16	83.77	9.26	2.32	0.12	359.76
		SD	0.02	89.67	39.64	9.38	8.30	0.44	45.61
	back	M	0.00	881.16	93.30	6.09	0.76	0.08	401.52
		SD	0.00	183.12	44.66	10.04	3.81	0.40	86.07
	line	M	0.00	252.03	26.32	2.07	0.00	0.00	116.44
		SD	0.00	157.76	21.40	6.51	0.00	0.00	72.47
	Total	M	0.01	1874.35	203.38	17.41	3.09	0.20	877.72
		SD	0.02	200.33	68.58	18.75	8.98	0.82	99.41
3-3	wing	M	0.00	614.55	69.59	9.33	1.25	0.24	292.76
		SD	0.00	174.25	42.25	13.45	2.99	0.66	83.25
	back	M	0.00	718.22	83.35	7.14	0.00	0.00	310.80
		SD	0.01	250.42	69.70	23.40	0.00	0.00	107.14
	line	M	0.00	220.01	19.85	0.00	0.00	0.00	103.36
		SD	0.00	139.48	17.89	0.00	0.00	0.00	65.39
	Total	M	0.00	1552.77	172.79	16.46	1.25	0.24	706.92
		SD	0.01	461.35	105.31	33.09	2.99	0.66	212.59