

Environmental Noise Regulations – Round 4

Central Area Committee Meeting

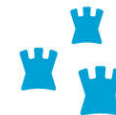
13th February 2024



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 Bhaile Átha Cliath
 Dublin City Council

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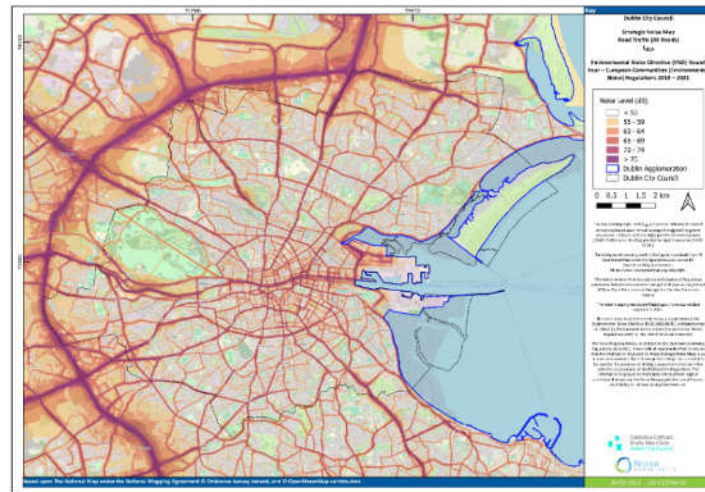
Legislative Background

European Communities (Environmental Noise) Regulations 2018 - 2021 (S.I. 549/2018 & 663/2021)

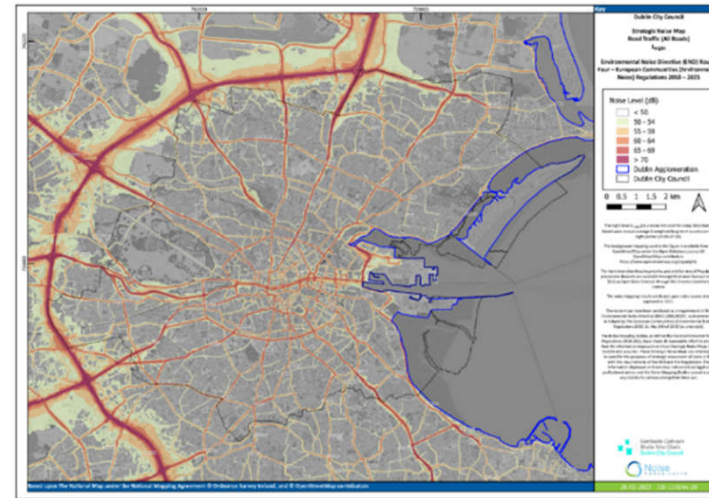
- The Regulations give effect to the Environmental Noise Directive (END) 2002/49/EC
- Apply to environmental noise, created by human activities, which people are exposed to; in built-up areas, in public parks/quiet areas, near schools & hospitals and other noise-sensitive buildings /areas.
- The Regulations/END requires two indicators to be applied;
 - L_{den} - annual average day, evening and night noise level and is a measure of 'annoyance' (Reporting threshold 55dB)
 - L_{night} - annual average night-time noise level and is designed to assess sleep disturbance (Reporting threshold 50dB).
- Regulations require Noise Mapping Bodies (NMBs) to prepare **Strategic Noise Maps** every 5 years for;
 - Agglomerations (>100,000 persons) (road, rail, airports & industry)
 - Major roads (>3,000,000 vehicle passages per year)
 - Major rail (>30,000 train passages per year)
 - Major airport (>50,000 movements per year)
- The Regulations require Action Planning Authorities (APAs) to make **Noise Action Plans** every 5 years for each of the areas covered by the Strategic Noise Maps.
- Member States must report on the numbers of people who are exposed to noise levels above the reporting thresholds for a range of noise sources.
- Noise Mapping Bodies must calculate the harmful effects associated with noise (Ireland only)



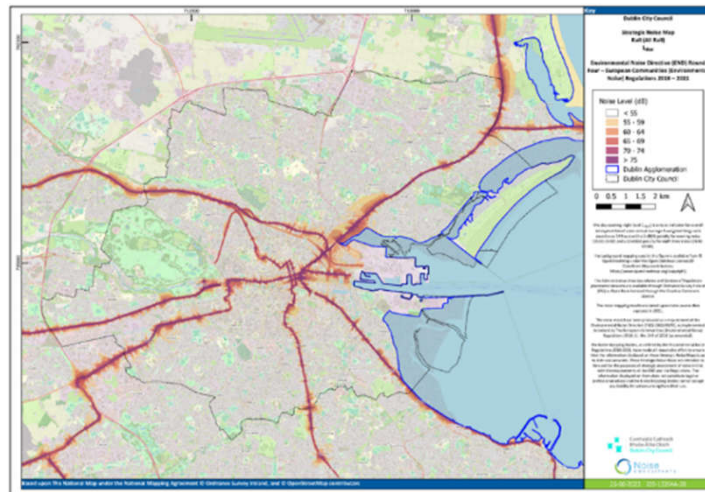
Strategic Noise Maps



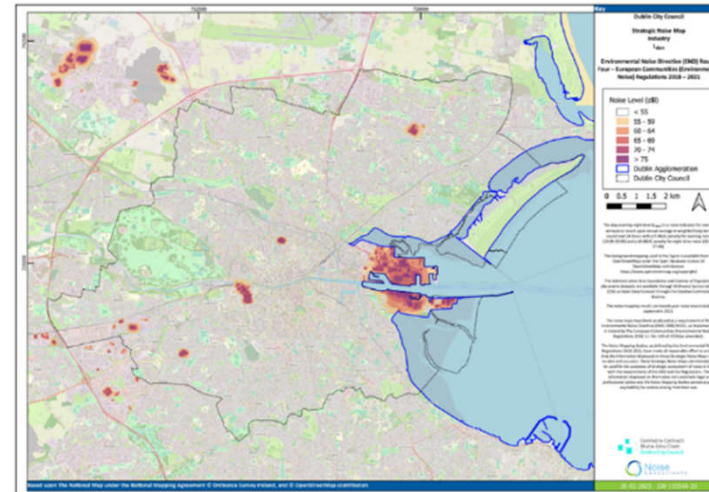
Roads
- Lden



Roads
- Lnight



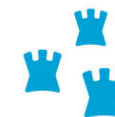
Rail -
Lden



Industry
- Lden

•Dublin City Council Air Quality Monitoring and Noise Control Unit's web page;
<https://www.dublincity.ie/residential/environment/role-air-quality-monitoring-and-noise-control-unit/dublin-city-noise-maps>

•EPA Maps web page; <https://gis.epa.ie/EPAMaps/>



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Noise Population Exposure Statistics & Harmful Effects

Noise Exposure (dB Lden)	Road (All Sources)		Road (Major Sources)		Rail		Industry	
	Dublin Agglomeration	Dublin City Council	Dublin Agglomeration	Dublin City Council	Dublin Agglomeration	Dublin City Council	Dublin Agglomeration	Dublin City Council
55-59	287,422	90,298	150,999	31,298	33,912	18,741	1,675	1,441
60-64	160,531	55,869	78,830	20,652	19,312	10,498	360	344
65-69	78,660	39,721	53,634	26,719	14,628	7,802	101	99
70-74	23,068	12,349	20,725	11,170	10,687	6,552	31	31
>=75	2,451	371	2,430	363	5,681	4,405	0	0
	552,132	198,608	306,618	90,202	84,220	47,998	2,167	1,915
Noise Exposure (dB Lnight)	Dublin Agglomeration	Dublin City Council	Dublin Agglomeration	Dublin City Council	Dublin Agglomeration	Dublin City Council	Dublin Agglomeration	Dublin City Council
50-54	169,176	50,743	104,774	22,946	22,358	12,667	1,132	1,032
55-59	78,403	35,358	54,734	22,572	15,478	8,155	255	244
60-64	32,959	19,224	29,022	16,543	10,644	6,752	10	10
65-69	6,285	2,601	6,169	2,489	6,193	3,933	31	31
>=70	406	5	390	5	1,889	1,717	0	0
	287,229	107,931	195,089	64,555	56,562	33,224	1,428	1,317

Dublin Agglomeration Road			Dublin Agglomeration Rail		
Harmful Effect	Dublin Agglomeration	Dublin City Council	Harmful Effect	Dublin Agglomeration	Dublin City Council
Ischaemic Heart Disease	101	40			
Highly Annoyed	108,380	40,727	Highly Annoyed	21,052	12,406
Highly Sleep Disturbed	28,996	10,641	Highly Sleep Disturbed	10,987	6,630

Note: that harmful effects is a statistical approach across the whole population covered by the noise maps, and is not an accurate assessment of the possible health effects at any given location.



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Noise Action Plan Requirements

Requirements of Noise Action Plan (NAP)

- Objective of the Regulations;
 - “... to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise.”*
- The Noise Action Plan must;

Level of effect	Source	Level	WHO Guidelines
Noise above these levels is associated with adverse health effects and adverse effects on sleep	Aircraft	45 dB L _{den, outside} 40 dB L _{night, outside}	ENG 2018
	Railways	54 dB L _{den, outside} 44 dB L _{night, outside}	ENG 2018
	Roads	53 dB L _{den, outside} 45 dB L _{night, outside}	ENG 2018
	Wind Turbines	45 dB L _{den, outside}	ENG 2018

“...determine the measures to be included in an action plan” and;

“.....address priorities which—

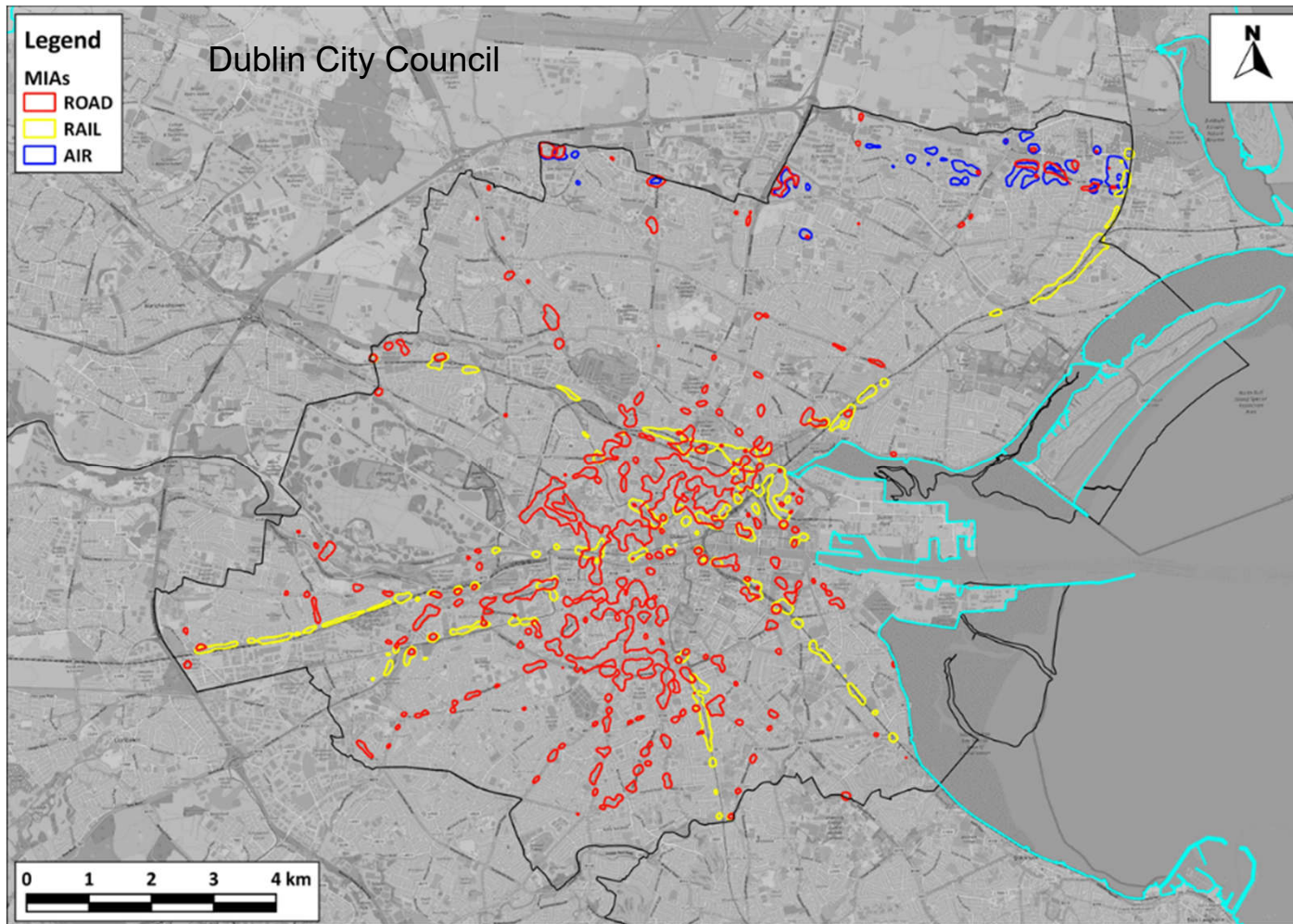
(i) may be identified on the basis of exceedances of any relevant noise limit value or other relevant criteria established by the Agency in accordance with subparagraph (3), and

(ii) shall, in the first instance, address the most important area or areas, as the case may be, established by strategic noise mapping. “ and ;

“have as its objective that of also protecting quiet areas in an agglomeration “



Dublin City Council - Most Important Areas (MIA)



	Total No. of MIAs	MIAs (Road)	MIAs (Rail)	MIAs (Air)
Dublin City Council	320	214	78	28



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Dublin City Council – Priority Important Areas

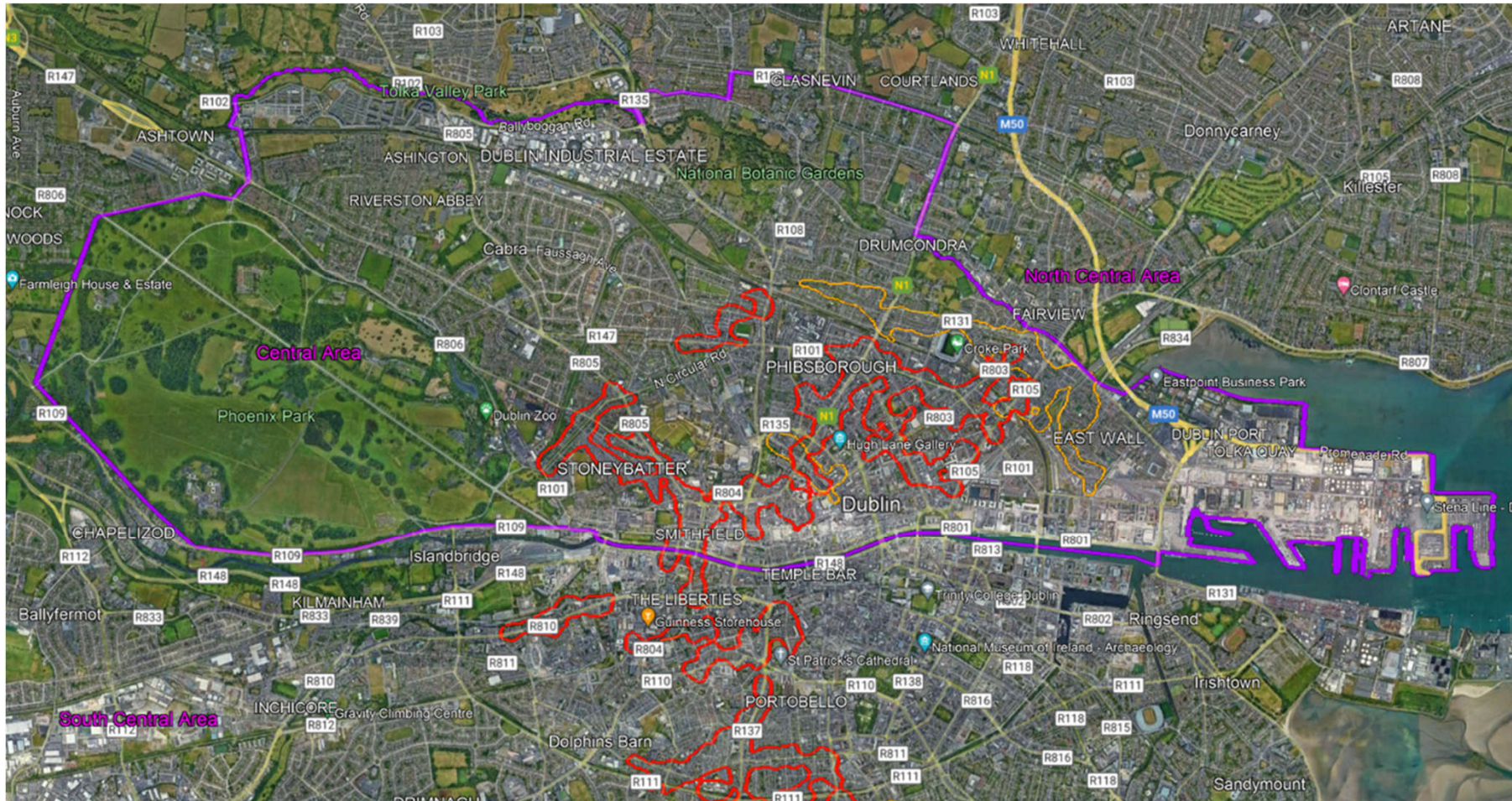


Red – Road
Orange – Rail/Luas

Action Planning Authority	Number of cPIAs	cPIAs - Road	cPIAs - National Road	cPIAs - Rail (Irish Rail)	cPIAs - Rail (Luas)
Dublin City Council	11	7	0	2	2

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Central Area – Priority Important Areas

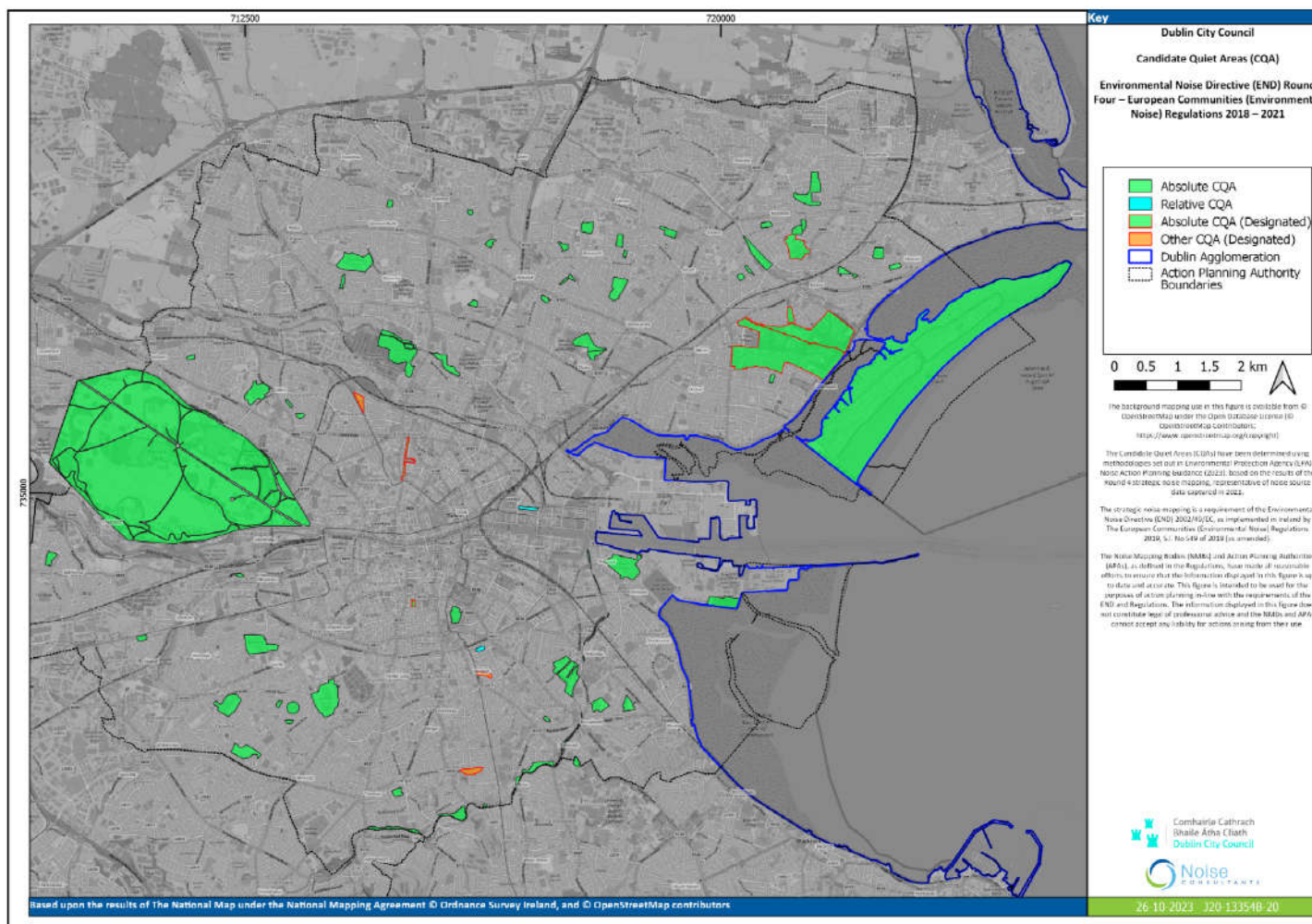


Central Area PIAs 1, 3, 4, 6, 8, 10



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Dublin City Council - Candidate Quiet Areas



Action Planning Authority	Total: PCQAs Considered	Candidate Quiet Areas (CQAs) - Absolute	Candidate Quiet Areas (CQAs) - Relative	Candidate Quiet Areas (CQAs) - Other	Total: CQAs
Dublin Agglomeration	650	172	7	7	186
Dublin City Council	208	62	2	5	69



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Draft Noise Action Plan – Noise Management Framework

Measures & Actions		Policy Principle	Time scale
Noise Action Plan Preparation			
	Noise Action Plan Completion		18th July 2024
General Noise Management Measures and Actions			
DCC_1.1	Dublin City Council Noise Working Group	All	Bi-annual
DCC_1.2	Noise Action Plan Working Group(s) - Action Planning Authorities & Transport Infrastructure Owners	All	Bi-annual
DCC_1.3	Annual Report to Environmental Protection Agency (EPA)	All	Annual
DCC_1.4	Planning Application Advice, Conditioning and Enforcement	Prevention	Ongoing
DCC_1.5	Continued Investigation and Management of Noise Complaints	Prevention	Ongoing
DCC_1.6	Maintain Existing Ambient Noise Monitoring Network	Prevention	Ongoing
DCC_1.7	Noise Measurements at Priority Important Areas (PIAs), Candidate Quiet Areas (CQAs) & Other Locations	Mitigation	Short-term
DCC_1.8	Stakeholder Collaboration	All	Ongoing
DCC_1.9	Ongoing Community Engagement	All	As Required
DCC_1.10	Support the Development of National Noise and Other Related Policy & Guidance	Prevention	Short to Long-term
Existing Plans, Projects and Strategies			
DCC_2.1	Implementation of the Dublin City Centre Transport Plan 2023	Mitigation	Short to Medium-term
DCC_2.2	Continued Delivery of the Active Travel Programme	Prevention/Mitigation	Short to Long-term
DCC_2.3	Support Delivery of the Greater Dublin Area Transport Strategy 2022 - 2042	Mitigation	Short to Long-term
DCC_2.4	Implementation of the Dublin City Council Climate Action Plan 2024 - 2029	Prevention/Mitigation	Short to Long-term
Priority Important Area Noise Management Measures and Actions			
DCC_3.1	Evaluation of each Priority Important Area (PIA)	Mitigation	Short-term
DCC_3.2	Review Road Maintenance Works Programme for Noise Benefits within Priority Important Areas (PIAs) and Other Areas	Mitigation	Ongoing
DCC_3.3	Road Surface Noise Mitigation Study	Mitigation	Short-term
DCC_3.4	Implement of Recommended Noise Mitigation Measures	Mitigation	Medium to Long-term
Candidate Quiet Areas Measures and Actions			
DCC_4.1	Evaluation of Shortlisted Candidate Quiet Areas (CQAs)	Protection	Short to Medium-term
DCC_4.2	Proposal for Quiet Area(s) Designation	Protection	Annually



Thanks You – Questions



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