



Diploma Supplement

MSc

Environmental Sciences

This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diploma, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should be given the reason why.

1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1	Family name(s)	Secundo
1.2	Given name(s)	Marianna Carole
1.3	Date of Birth, Country	23 December 1991, The Netherlands
1.4	Student Identification Number	970612-138-400

2 INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Name of qualification and title conferred (in original language)

Master of Science in

Environmental Sciences

Students who have successfully completed a Master study programme at Wageningen University are entitled to work as an engineer (ir) or as a Master of Science. No further certification is required.

2.2 Main field(s) of study for the qualification

MSc programme in

Environmental Sciences

Minor

Sustainable Land Management

2.3 Name and status of the awarding institution (in original language)

Wageningen University; public university, state recognised

2.4 Name and status of institution (if different from 2.3) administering studies (in original language)

See 2.3

2.5 Language(s) of instruction/examination

English.

3 INFORMATION ON THE LEVEL OF THE QUALIFICATION

- | | | |
|-----|----------------------------------|---|
| 3.1 | Level of qualification | Master Degree |
| 3.2 | Official length of the programme | The official duration of the programme is 120 ECTS, which equals two years of study. One ECTS equals 28 hours of study, according to the European Credit Transfer and Accumulation System |
| 3.3 | Access requirement(s) | <p>For admission to a Masters study programme, the student must possess a relevant Bachelors degree. The supplement to the Education and Examination Regulations of the Masters study programmes WU contains the list of Bachelors degrees that provide admission to one or more contiguous Masters study programmes.</p> <p>For admission to a non-contiguous Masters study programme, the student must have proof of admission to the relevant Masters study programme. This proof of admission is granted by the Executive Board. The proof of admission to the non-contiguous Masters study programmes is provided if the admission requirements are satisfied.</p> |

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4 INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1 Mode of study Full time Master programme

4.2 Programme requirements

Learning Outcomes

After successful completion of this MSc programme graduates are expected to be able to:

- draw up an integrated analysis of perceived or potential environmental and sustainability issues, based on insight in the environmental causality chain, linking driving forces in society, pressure on the environment, changes in environmental quality, effects on nature and public health, and societal response;
- take multiple perspectives and pursue interdisciplinary approaches to environmental problem solving and sustainable resource management;
- interact with stakeholders of different cultural backgrounds or nationalities and with specialists from other disciplines so as to arrive at a common identification, analysis, and solution strategy of the issues involved;
- define the scientific issues ensuing from an integrated analysis, taking account of relevant spatial scales (from local to global) and adopting a long-term perspective;
- independently design and execute environmental research in accordance with academic standards, thus contributing to the development of the body of knowledge in the field, or to the development of creative and innovative solutions to environmental and sustainability issues;
- design strategies to deal with environmental and sustainability issues in the practice of policy development and management;
- act as a consultant, advising (non-)governmental organisations and commercial corporations on how best to improve current and future activities with regard to the environment.

In order to perform these tasks, graduates from this programme are able to:

- clearly present, both orally and in writing, research proposals and results, as well as plans for measures and interventions, taking into account the nature of the target group;
- formulate and manage projects in the fields of research, consultancy or management;
- support working parties and committees, negotiate, and act as a mediator, effectively and appropriately dealing with cultural diversity;
- reflect on the ethical aspects of their research and plans for measures and interventions;
- design and plan their own learning processes by virtue of continuous reflection on personal knowledge, skills, attitudes and performance;

The graduate from this MSc programme is well equipped to continue academic training (PhD) or to start - or continue - a professional career requiring independent scientific performance.

4.3 Programme details (e.g. modules or units studied), and the individual grades/marks/credits obtained

The following list shows all the courses of the programme the student has attended. It states the course, its number of credits, and the final mark the student obtained for it.

<i>Subject</i>	<i>Description</i>	<i>ECTS credits</i>	<i>Mark</i>
Core Subject			
ENP-35806	Environmental Quality and Governance	6	7.0
ESA-20806	Principles of Environmental Sciences	6	8.5
ESA-22806	Environmental Systems Analysis: Methods and Applications	6	6.0
ESA-31306	Integrated Ecosystem Assessment in Regional Management	6	9.0
ESA-60312	European Workshop Environmental Sciences and Management	12	6.5
YRM-20306	Research Methods in Environmental Science	6	8.5
Optional Subject			
SLM-30806	Land Degradation & Development	6	7.0
SLM-31806	Erosion Processes and Modelling	6	8.5
SLM-32306	Sustainable Land Management Policies	6	8.5
Internship			
ESA-70424	MSc Internship Environmental Systems Analysis (Carried out in the Netherlands)	24	8.5
Thesis			
ESA-80436	MSc Thesis Environmental Systems Analysis (Carried out in Indonesia)	36	89.5
Total		120	
Minor Sustainable Land Management			
SLM-30806	Land Degradation & Development		
SLM-31806	Erosion Processes and Modelling		
SLM-32306	Sustainable Land Management Policies		

Subject (course unit code)

The subject refers to the course unit code in the study handbook.

Duration of course unit

The duration of the course unit is described in the study handbook. Until the academic year 2009/2010 Wageningen University has 5 periods of 8 weeks (12 credits). As of the academic year 2010/2011 the number of periods is 6. This is divided in 4 periods of 8 weeks (12 credits) and 2 periods of 4 weeks (6 credits). Except thesis and internships almost all courses have a duration of 1 period.

1 full academic year = 60 credits

1 period = 6 or 12 credits

Mark

Before 1 October 2010 Wageningen University gave the marks 6, 7, 8, 9 and 10. After 1 October 2010 Wageningen University has changed the range into 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5 and 10.0

4.4 Grading Table

The grading table requires universities to keep track of their grading practice and culture, which is good practice in many institutions across Europe.

The ECTS grading table allows for simple, transparent interpretation and conversion of grades from one system or context to another, and therefore does justice to the level of academic performance of all learners. Used correctly, it bridges different grading systems as well as different cultures in the European Higher Education Area and beyond.

The grading table gives the distribution of grades for this specific programme. It presents how many students (in percentages) receive a specific grade. This provides all necessary information to convert the grade in any local grading system. In case of too few results to calculate the distribution, the programme specific grading table is replaced by the BSc average grading table.

From 1 October 2010, Wageningen University has extended the number of grades; 6.5, 7.5 etc. The grading table is based on data collected in the preceding years, therefore limited information is available about the distribution of the new grades. The grading table presented here, gives the most reliable overview.

<i>National / Wageningen University Grade</i>	<i>Total number awarded in reference group</i>	<i>Grading percentages Environmental Sciences*</i>
10	9	0.3%
9.5	32	1.1%
9	113	3.9%
8.5	299	10.2%
8	630	21.5%
7.5	670	22.8%
7	561	19.1%
6.5	363	12.4%
6	258	8.8%
Total	2935	100%

* Based on the total number of grades awarded in the degree programme concerned (or average Wageningen University MSc programmes) during three preceding years.

4.5 Overall classification of the qualification (in original language)

geslaagd
passed

5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study

A Master degree makes a student eligible for a PhD-programme.

5.2 Professional status (if applicable)

6 INFORMATION ON THE LEVEL OF THE QUALIFICATION

6.1 Additional information The MSc programme Environmental Sciences is accredited on 31 July 2014 by the NVAO.

6.2 Further information sources www.wageningenuniversity.nl

Wageningen University
Student Service Centre
P.O. Box 414
6700 AK Wageningen
The Netherlands

www.nuffic.nl

7 CERTIFICATION OF THE SUPPLEMENT

7.1 Date 29 August 2017

7.2 Signature



Dr F. Bakema

7.3 Capacity Corporate Director Education, Research & Innovation

7.4 Official stamp

8 INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

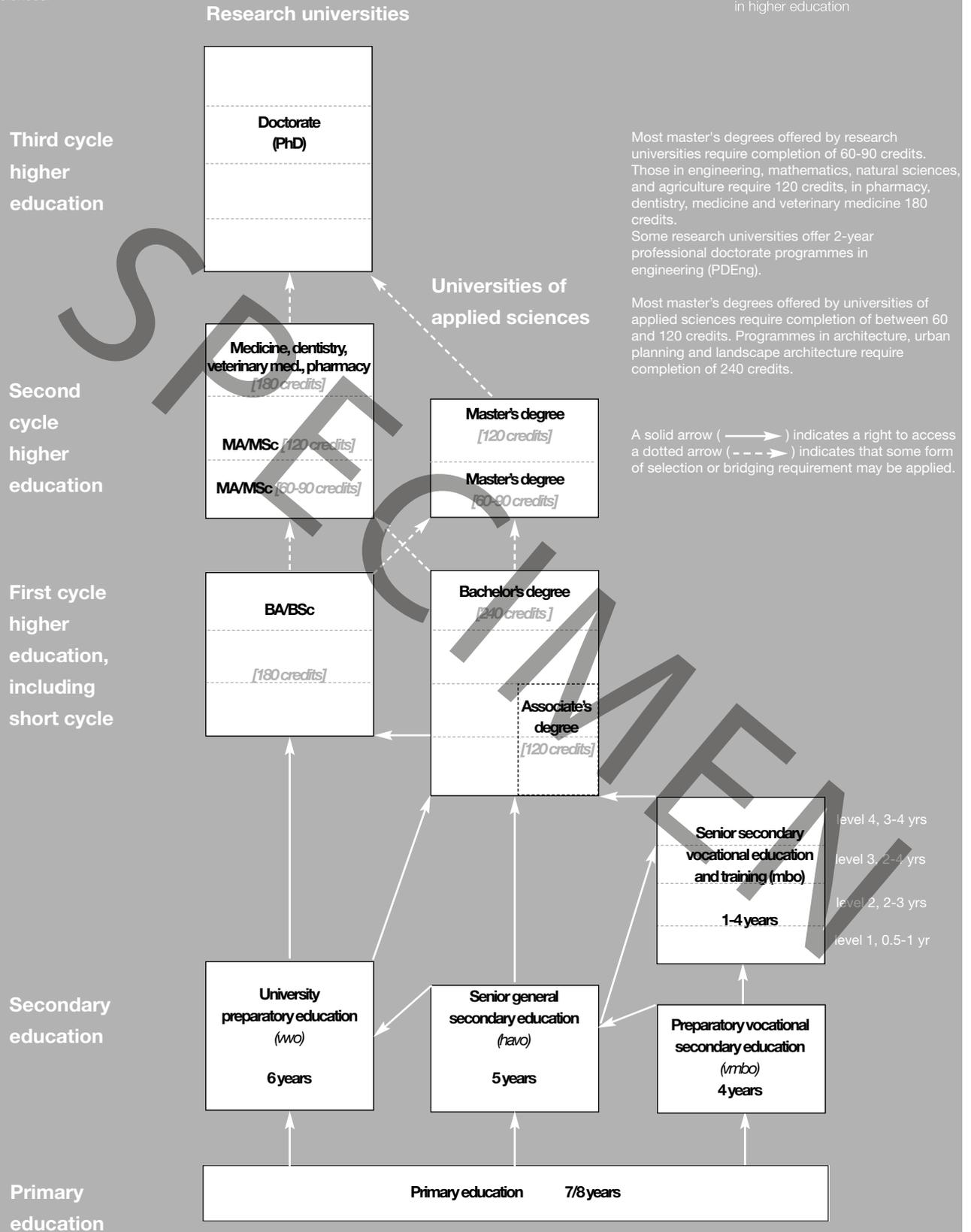
See enclosed description of the education system in the Netherlands.

The Dutch education system

The higher education system in the Netherlands is based on a three-cycle degree system, consisting of a bachelor, master and PhD. Two types of programmes are offered: research-oriented degree programmes offered by research universities, and professional higher education programmes offered by universities of applied sciences.



Netherlands organisation for international cooperation in higher education



Higher education system in the Netherlands

Higher education in the Netherlands is organised around a three-cycle degree system, consisting of bachelor's, master's and PhD degrees.

Two types of higher education programmes are offered: research-oriented degree programmes offered primarily by research universities, and professional higher education programmes offered primarily by universities of applied sciences.

Primary and secondary education

Access to higher education

Children are allowed to begin school at the age of four, but are not legally required to do so until the age of five. Primary education lasts eight years (of which seven are compulsory). During their last year, pupils are advised on the type of secondary education they should pursue.

Secondary education, which begins at the age of twelve and is compulsory until the age of sixteen, is offered in various forms and at different levels. Vmbo programmes (four years) combine general and vocational education and prepare pupils to go on to senior secondary vocational education and training (mbo), lasting one to four years. There are two types of general education that grant admission to higher education: havo (five years) and vwo (six years). Pupils are enrolled according to their ability. The last two years of havo and the last three years of vwo are referred to as the 'second phase' (tweede fase), or upper secondary education. During these years, pupils focus on one of four subject clusters (profielen), each of which emphasises a certain field of study in addition to satisfying the general education requirements. Each cluster is designed to prepare pupils for study at the tertiary level. A pupil enrolled at a vwo or havo school can choose from the following subject clusters:

1. Science and Technology (Natuur en Techniek)
2. Science and Health (Natuur en Gezondheid)
3. Economics and Society (Economie en Maatschappij)
4. Culture and Society (Cultuur en Maatschappij)

Only the six-year vwo diploma grants access to bachelor's programmes at research universities; the havo diploma and the highest level of mbo grant access to bachelor's programmes at universities of applied sciences.

Higher education

Higher education in the Netherlands is offered at two types of institutions: research universities and universities of applied sciences. Research universities include general universities, universities specialising in engineering and agriculture, and the Open University. Universities of applied sciences include general institutions as well as institutions specialising in a specific field such as agriculture, fine and performing arts or teacher training. Whereas research universities are primarily responsible for offering research-oriented programmes, universities of applied sciences are primarily responsible for offering programmes of higher professional education, which prepare students for specific professions. These tend to be more practice oriented than programmes offered by research universities.

In this binary, three-cycle system, bachelor's, master's and PhD degrees are awarded. Short-cycle higher education leading to the associate degree is offered by universities of applied sciences. Degree programmes and periods of study are quantified in terms of the ECTS credit system.

The focus of degree programmes determines both the number of credits required to complete the programme and the degree which is awarded. A research-oriented bachelor's programme requires the completion of 180 credits (three years) and graduates obtain the degree Bachelor of Arts or Bachelor of Science (BA/BSc), depending on the discipline. A bachelor's degree awarded in the applied arts and sciences requires 240 credits (four years), and graduates obtain a degree indicating the field of study (for example, Bachelor of Engineering, B Eng, or Bachelor of Nursing, B Nursing). An associate degree in the applied arts and sciences requires 120 credits (two years), and students who complete the two-year programme can continue studying for a bachelor's degree in the applied arts and sciences.

A research-oriented master's programme requires the completion of 60, 90 or 120 credits (one, one-and-a-half or two years). In engineering, agriculture, and mathematics and the natural sciences, 120 credits are always required. Graduates obtain a Master of Arts or Master of Science (MA/MSc). A master's degree awarded in the applied arts and sciences requires the completion of 60 to 120 credits and graduates obtain a degree indicating the field of study (for example, Master of Architecture, M Arch).

The third cycle of higher education, leading to a PhD, is offered only by research universities. The major requirement is completion of a dissertation based on original research that is publicly defended. All research universities award the PhD. In addition to doctorate programmes, the three engineering universities offer technological designer programmes consisting of advanced study and a personal design assignment in a number of engineering fields. The technical designer programme requires two years of study to complete and graduates obtain the degree Professional Doctorate in Engineering (PDEng). The training of medical specialists is the responsibility of the professional group in an organisational setting at a university hospital.

Requirements for access to higher education

For access to research-oriented bachelor's programmes, students are required to have a vwo diploma or to have completed the first year (60 credits) of a bachelor's programme at a university of applied sciences. The minimum access requirement to universities of applied sciences is either a havo diploma or a diploma of secondary vocational education (mbo), provided certain conditions are met. The vwo diploma also grants access to universities of applied sciences. For access to both types of higher education, pupils are required to have completed at least one of the subject clusters that fulfil the requirements for the higher education programme in question. A quota, or *numerus fixus*, applies for access to certain programmes, primarily in the medical sciences, and places are allocated mainly using a weighted lottery. Potential students older than 21 years who do not possess one of the qualifications mentioned above can qualify for access to higher education on the basis of an entrance examination and assessment (recognition of prior learning). For access to certain programmes, particularly those in the fine arts, students have to demonstrate the required artistic abilities. The only access requirement for the Open University is that applicants be at least eighteen years of age.

For access to all master's programmes, a bachelor's degree in one or more specific disciplines is required, in some cases in combination with other requirements. Graduates with a bachelor's degree in the applied arts and sciences usually have to fulfil additional requirements for access to a research-oriented master's programme.

Credit system and grading

A student's workload is measured in ECTS credits. According to Dutch law, one credit represents 28 hours of work and 60 credits represents one year of full-time study. The grading system used in the Netherlands is on a scale from 1 (very poor) to 10 (outstanding). The lowest passing grade is 6; 9s are seldom given and 10s are extremely rare. Grades 1-3 are hardly ever used. The academic year is 42 weeks long.

Quality assurance and accreditation

A guaranteed standard of higher education, and alignment with the Qualifications Framework for the European Higher Education Area, is maintained through a system of legal regulation and quality assurance, in the form of accreditation. The Ministry of Education, Culture and Science is responsible for legislation pertaining to education. The agriculture and public health ministries play an important role in monitoring the content of study programmes in their respective fields.

Quality assurance is carried out through a system of accreditation, administered by the Accreditation Organisation of the Netherlands and Flanders (NVAO). According to the Dutch Higher Education Act, all degree programmes offered by research universities and universities of applied sciences must be evaluated according to established criteria. Programmes that meet the criteria are accredited: i.e. recognised for a period of six years. Only accredited programmes are eligible for government funding; students receive financial aid and graduate with a recognised degree only when enrolled in, and after having completed, an accredited degree programme. All accredited programmes are listed in the Central Register of Higher Education Study Programmes (CROHO).

Since January 2011, the Netherlands has a new accreditation system. The process described above still applies, but beginning in 2011, higher education institutions can request the NVAO to conduct an 'institutional quality assessment' to determine the extent to which the institution is capable of guaranteeing the quality of the programmes it offers. Programmes offered by institutions that receive a positive evaluation still have to be accredited, but the accreditation procedure takes less time and is not as extensive.

Besides the accreditation of degree programmes, the Netherlands has a system by which the Ministry of Education, Culture and Science recognises higher education institutions by conferring on them the status of either 'funded' or 'approved'. "Funded" indicates the institution is fully financed by the government. "Approved" indicates that the institution does not receive funds from the government and has to rely on its own sources of funding. Whether a degree programme is offered by a 'funded' or an 'approved' institution, it must be accredited and registered in CROHO to be considered recognised.

N.B. If a bachelor's or master's degree programme is not registered in the CROHO, the quality is not assured by the Dutch quality assurance system. The quality may however be assured by another system.

National Qualifications Frameworks

An important outcome of the Bologna Process is the development of a Framework for Qualifications of the European Higher Education Area. This overarching framework provides a general and common structure for qualifications awarded in three cycles of higher education in countries signatory to the Bologna Declaration, and offers recommendations and guidelines for the development of mutually understandable qualifications frameworks at national level.

The Netherlands was one of the first countries in the European Higher Education Area to complete this national qualifications framework, which was subsequently evaluated by the Verification Committee and found to be compatible with the Framework for Qualifications of the European Higher Education Area (QF-EHEA). The National Qualifications Framework of the Netherlands describes in detail the learning outcomes associated with three levels of higher education qualifications, in terms that are internationally compatible. The responsibility for overseeing the framework and updating it when necessary has been allocated to the NVAO. Further information on the framework can be obtained on the NVAO website: www.nvao.net/nqf-nl.

In addition to the QF-EHEA, the European Union also has an overarching European Qualifications Framework for Lifelong Learning (EQF-LLL). The EQF-LLL consists of eight levels and includes qualifications awarded in general and vocational secondary education, as well as in higher education. The Netherlands is currently in the final stages of developing its National Qualifications Framework based on the EQF-LLL.

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Nuffic is the Netherlands organisation for international cooperation in higher education. Our motto is Linking Knowledge Worldwide. This means linking people, because it's knowledge that makes us unique as people. Nuffic works in line with Dutch government policy to serve students and higher education institutions in three key areas:

Programme Management

Administrating international mobility programmes (scholarships) and institutional cooperation programmes.

Information Services

Providing information about higher education systems in the Netherlands and in other countries; providing credential evaluation services; providing information in the Netherlands about studying abroad, and in other countries about studying in Holland; promoting Dutch higher education in other countries; encouraging international mobility.

Expertise

Conducting studies into international cooperation in higher education; providing information to expert groups and consultation forums; transferring our knowledge of international cooperation in higher education through courses and seminars.

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